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ABSTRACT

This book is directed toward inferring a philosophy for vocational education. The issues and concerns that surrounded the early development and expansion of vocational education are first discussed. The preferred practices--the principles--are then developed in three categories. "Principles and People" includes the topics of guidance, lifelong learning, needs, open to all, placement, sex bias/stereotyping, special needs, student organizations, teachers, and work ethic. "Principles and Programs" presents these principles: career education, comprehensive education, curriculum, families of occupations, innovation, job entry, safety, and supervised occupational experience. "Principles and Processes" includes the topics of advice seeking, articulation and coordination, evaluation, followup, legislation, planning, and research. Basic philosophic concepts in education are reviewed and summarized--the essentialist, the pragmatist, and the existentialist viewpoints. Each philosophy provides a generalized response to four fundamental questions regarding the nature of the learner, teacher's role, curriculum, and role of schooling. The same questions are used to derive a philosophic position for vocational education. The principles of vocational education are used to provide a response to these issues, and the responses are compared. A philosophic position derived through inductive processes results. (YLB)

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Special Publication Series No. 48

PRINCIPLES AND A PHILOSOPHY FOR VOCATIONAL EDUCATION

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To Marlann

TABLE OF CONTENTS

Page

FOREWORD xi

EXECUTIVE SUMMARY xiii

CHAPTER 1. PHILOSOPHERS AND PRACTITIONERS 1

Introduction 1
Philosophy's Role 2
Principles and Practitioners 4
Policy and Policymakers 6
Three in a Tub 7
Toward a Paradigm 9

CHAPTER 2. THE HISTORICAL SETTING AND PRINCIPLES OF VOCATIONAL EDUCATION 13

Historical Context 13

Democracy and the Schools 13
Life Patterns for Women 15
Apprenticeship Programs 17
A Widespread Concern 18

Principles 19

CHAPTER 3. PRINCIPLES AND PEOPLE 23

Introduction 23

Guidance 24

The Principle 24
An Early Concern 24
Current Directions 25
Counselors 27
Looking Ahead 28

Lifelong Learning 31

The Principle 31
Early Practices 31
A Contemporary View 33

Needs 39

The Principle 39
Industry and Business 39

Open to All 45

The Principle 45
Democratic Education 45
Theory into Practice 45

Placement 51

The Principle 51
Building a Bridge 51
Completing the Job 51

Sex Bias/Stereotyping 57

The Principle 57
Early Views 57
Emerging Issues 59

Special Needs 67

The Principle 67
More Than Equal 67
Solutions 68

Student Organizations 75

The Principle 75
Future Farmers of America Leads the Way 75
Expanding Opportunities 75

Teachers 81

The Principle 81
Old Occupational Demands 81
New Professional Expectations 83

Work Ethic 91

The Principle 91
Being Traditional 91
Ethics and Change 91

CHAPTER 4. PRINCIPLES AND PROGRAMS 97

Introduction 97

Career and Prevocational Education 99

The Principle 99
An Old Idea Reborn 99
Contributions 100
Summary 102

Comprehensive Education 105

The Principle 105
Single Versus Dual Administration 105
Resolving the Conflicts 107
Educational Intelligibility 108
Relevancy 109
Removing Stigmas 110
Changing Education 111

Curriculum 117

The Principle 117
Preparation for Work 117
Old Goals Revisited 118

Families of Occupations 123

The Principle 123
One Job or Many? 123
Creating Options 124
Secondary Versus Postsecondary 124

Innovation 127

The Principle 127
Exemplary Programs and Innovation 127
Innovation and Renewal 128
Innovation as Improvement 128

Job Entry 133

The Principle 133
A Constant Focus 133
A Means, Not an End 134

Safety 139

The Principle 139
Safety at First 139
Educating for Safety 139

Supervised Occupational Experience 143

The Principle 143
An Early Expectation 143
Keeping a Good Thing 146

CHAPTER 5. PRINCIPLES AND PROCESSES 151

Introduction 151

Advice Seeking 152

The Principle 152
Early Beginnings 152
Modern Rationale 153

Articulation and Coordination 157

The Principle 157
Some Definitions 157
A Recent Concern? 157
Today's Issues 158

Evaluation 163

The Principle 163
Evaluation Defined 163
Why Evaluate? 163

Follow-Up 167

The Principle 167
A Commitment Unfilled 167
Focus on Students 167
Program Improvement 168
Customer Follow-Up 168

Legislation 171

The Principle 171
Where It All Began 171
Federal Versus State Responsibility 173

Planning 177

The Principle 177
Setting Directions 177
A Comprehensive View 178

Research 185

The Principle 185
A Federal Board Role 185
Modern Research Programs 185

CHAPTER 6. PHILOSOPHICAL CONCEPTS IN EDUCATION 191

Educational Philosophy — A Layperson's View 191
Viewing the Learner 196

The Essentialist Philosophy 196
The Pragmatist Philosophy 198
The Existentialist Philosophy 198

The Teacher's Role 199

The Essentialist Teacher 200
The Pragmatist Teacher 201
The Existentialist Teacher 202

The Curriculum as Truth 202

The Essentialist Curriculum 203
The Pragmatist Curriculum 204
The Existentialist Curriculum 205

Schools and Society 205

Essentialist Values 206
Pragmatic Values 207
Existentialist Values 208

Looking Back 209
Looking Ahead 209

CHAPTER 7. PRINCIPLES TO PHILOSOPHY 211

An Inductive Process 211
Principles and the Nature of the Learner 212
Principles and the Role of the Teacher 213
Principles and the Curriculum as Truth 215
The Purpose of Schools in Society 217
Vocational Education's Position 219

CHAPTER 8. PHILOSOPHY, A TOOL FOR EVALUATION AND SYNTHESIS 225

Asking the Right Questions 225
Examining Contemporary Vocational Education 226
Examining the Future 230
A Conceptual Framework 232
Unfinished Business 236

BIBLIOGRAPHY 237

FOREWORD

For over fifty years, vocational education has relied on scattered, often unstated principles to guide its policies and practices, in the absence of a coherent philosophy. As a result, important assumptions about the nature of people, truth, and values have not been consistent and have encouraged opportunism, expediency, and a mindlessness in vocational education that has frequently replaced thoughtful analysis, synthesis, and reason-based decision making. This book identifies and analyzes the underlying principles of vocational education and uses them as a basis to offer a coherent philosophical position for vocational education that reflects human and economic needs, a contemporary knowledge base, and the values inherent in our society. The book is intended to articulate a practical philosophy to help guide the work and thinking of vocational education policymakers and practitioners at all levels.

Dr. Melvin D. Miller earned his B.S., M.Ed., and Ed.D. degrees from Oregon State University. After teaching vocational agriculture for several years, he served as the principal of a large, comprehensive high school in Oregon. He joined the staff at Oregon State University in 1968, where he was active in developing and implementing leadership programs in vocational education. Later, he headed comprehensive undergraduate and graduate programs in vocational-technical education at the University of Tennessee, Knoxville, and at Oklahoma State University, Stillwater, where he is the director of the School of Occupational and Adult Education.

Foremost among his numerous publications are:

Review and Synthesis of Research on Preparation of Leadership Personnel for Vocational and Technical Education, Eric Clearinghouse on Vocational and Technical Education, the Center for Vocational and Technical Research, July, 1972.

"Externing: Route to Leadership," *American Vocational Journal*, April, 1975.

"Let's Rethink the Funding of Teacher Education," *Journal of Industrial Teacher Education*, Spring, 1980.

In 1975, he presented a paper, "A Philosophy for Vocational Education" at the annual seminar of the State Directors of Vocational Education. Dr. Miller is a past president of the American Vocational Education Personnel Development Association. He has been a contributor for both the convention programs and yearbooks of the American Vocational Association.

Dr. Miller has directed several national projects and currently is the executive director of a project funded jointly by the U.S. Departments of Education and Commerce, "Promoting Economic Development Through Training for Small Business Ownership and Management."

The book was developed during the author's fellowship with the Advanced Study Center at the National Center for Research in Vocational Education. A number of National Center staff contributed their time and insights to the evolution and production of this volume. Appreciation is expressed to the substantial number of National Center staff who provided direct help and support services for this book. Appreciation is also expressed to Catherine Ashmore and Constance Faddis of the Field Services staff for editorial advice and assistance.

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Dr. Francis Tuttle, Director, State Department of Vocational and Technical Education, Stillwater, Oklahoma, and members of his staff are specially recognized for their contributions to vocational-technical education in typesetting and preparing this book.

Robert E. Taylor
Executive Director
The National Center for Research in
Vocational Education

EXECUTIVE SUMMARY

Principles and a Philosophy for Vocational Education applies to practitioners at all levels in the field of vocational education. Additionally, educators and board members who carry out or develop policies for vocational education programs will find this a significant resource in understanding the development of vocational education in America. Contemporary practices and preferences have influenced the development of high quality programs in vocational-technical education.

Principles of vocational education are defined as generalizations that state preferred practices and serve as guidelines for program and curriculum construction, selection of instructional practices, and policy development. The contemporary principles of vocational education reflect successful practices of the past and the reinterpretation of these principles to meet the needs of changing times.

By contrast, philosophy makes assumptions and speculations about the nature of human activity and the nature of the world. It can provide a framework for vocational educators to sort competing alternatives and provides a basis for action. Ultimately, philosophy becomes a conceptual framework for synthesis and evaluation because it helps vocational educators decide what should be and what should be different.

The significance of both philosophy and principles is developed. At the same time, distinctive and differing roles of quality programs are presented to assist the practitioner develop a conceptual framework for a coherent system of vocational education.

Principles are developed and presented in three major categories: Principles and People, Principles and Programs, and Principles and Processes. Principles and People include topics of

- Guidance
- Life-long learning
- Needs open to all
- Placement
- Sex bias/stereotyping
- Special needs
- Student organizations
- Teachers
- Work ethics

Principles and Programs include

- Career and prevocational education
- Comprehensive education
- Curriculum

- Families and occupations
- Innovation
- Job entry
- Safety
- Supervised occupational experience

Principles and Process include

- Advice seeking
- Articulation
- Coordination
- Evaluation
- Follow-up
- Legislation
- Planning
- Research

Basic philosophic concepts in education are reviewed and summarized—the essentialist, the pragmatist, and the existentialist. Each philosophy provides a generalized response to four fundamental questions

- What is the nature of the learner?
- What is the role of the teacher?
- How do you decide what should be taught?
- What is the role of schooling in America?

The same four questions are used to inductively derive a philosophic position for vocational education. The principles of vocational education are used to provide a response to these issues, and ultimately the nature of these responses is compared with the responses of the three philosophies. The outcome is a philosophic position derived through inductive processes.

Philosophy can assist vocational educators in making decisions about the future and guide policymakers in developing future policies for vocational education. While predicting the future is an uncertain business and validating predictions must await arrival of future events, the stability of philosophy can help remove some uncertainties and provide an immediate measure of the validity for the future. Similarly, evaluation can be influenced through the philosophic framework. Evaluation processes can stimulate a climate for active debate of values and goals in vocational education.

Assuming a philosophic position is central to examining the practices and functions of vocational education. Philosophy through its own pattern of consistency and coherence can help align thinking and the processes of evaluation. Without a philosophical framework, evaluation can become an instrument of pressure and self-serving interest groups who can divert

attention from the themes that are important to evaluating vocational education.

Philosophy also helps educators synthesize the currently known and knowable. Synthesis becomes a means for creating pathways to change in vocational education. Through this process, vocational educators can begin to arrive at alternatives for the future and vocational education can meet its own philosophical assumptions regarding change as a vital part of the growth process.

Finally, a conceptual framework for applying both principles and philosophy to the practices and future of vocational education is developed through a schematic formula. Examples in applying the schematic formula to contemporary issues in vocational education provide the reader with a tool to strengthen vocational-technical education programs.

CHAPTER 1
PHILOSOPHIES AND PRACTITIONERS

INTRODUCTION

Vocational education lacks a coherent philosophy. Moreover, philosophers are seldom given due recognition in vocational education. Some may even dispute that vocational education has any philosophers. Theorists, too, have ranked near the bottom of vocational education's hierarchy. Conceptualization has been devalued by vocational educators and practice is the primary currency of the enterprise. Thus, today, vocational education exists without an articulated philosophical framework.

Important assumptions about the nature of people, truth, and value are not consistently interjected as a part of vital deliberations on the future of vocational education. The lack of coherent philosophy has encouraged opportunism, expediency ("vulgar pragmatism"), and a mindlessness that frequently replace reasoning, thoughtful analysis, synthesis, and carefully weighed decisions representing desirable consequences for society. As a result, vocational educators have been unable to operate from a clearly articulated paradigm that reflects human and economic needs, a contemporary knowledge base, and the values inherent in our society. This book is directed toward the formation of such a paradigm.

In thinking about the paradigm, the analogy of the butcher-baker-candlestick-maker nursery rhyme is useful. In vocational education, the practitioners (i.e., teachers and administrators), policymakers, and philosophers are the butcher, baker, and candlestick maker, all in the same tub, making way through often rough seas without benefit of a philosophic keel board. Which one has the oars, the tiller, or the sails is not important when they all want to go in the same direction. However, when goals, strategies, and theories conflict, the smallest of storms can disable the craft.

Practitioners dominate the field of vocational education. Experience—mainly untested in an empirical sense—has built on experience. Preferred

practices have emerged to be emulated by succeeding generations of practitioners. Opportunistic strategies, in some cases, have replaced preferred practice, with only limited goals being achieved in an often mindless fashion.

Policymakers are also prominent in the affairs of vocational education. The policymaker's level of involvement—as an overseer, not a doer—is a "life jacket" when the going gets rough. New policy is set, goals adopted, and strategies promoted to get the craft back into calmer waters.

Philosophers and those who value philosophy have not, until recently, been evident in vocational education. Vocational educators have avoided philosophy as an abstract activity not likely to produce practical outcomes, and only recently has the value of philosophy gone up in the marketplace of vocational education.

The activities of the three in the tub—the practitioners, policymakers, and philosophers—are important in suggesting a paradigm for vocational education. Understanding what each can contribute and how those contributions influence and complement each other is important. The balance of this chapter examines these contributions.

PHILOSOPHY'S ROLE

Philosophic thinking represents assumptions and speculations about the nature of human activity and the nature of the world. Specifically, philosophy has three central concerns: the natures of reality, truth, and value. A statement of philosophy, then, is an articulation of fundamental assumptions about reality, truth, and value.

Weltanschauung, the German term for philosophy, provides a useful interpretation of the term "philosophy." *Weltanschauung* is translated as "world view," or, literally, as a way of viewing the world. It is clear that vocational educators, if they are to develop a way of viewing vocational education—a paradigm—must engage in philosophic activity.

The philosopher's task is to question assumptions about reality, truth, and value by asking the right questions—questions that are relevant and meaningful. In so doing, the philosopher attempts to get at issues that make a meaningful difference in society and in people's lives.

PHILOSOPHERS AND PRACTITIONERS

Without philosophy, a reasoned system of theory is not available to guide action. As Morris (1961) says:

> With a well thought out theory or philosophy of education an individual knows what he is doing and why. And it is when our practical conduct becomes more and more rational, i.e., increasingly subject to critical theory, that we say it becomes more and more professional in character. The truly professional teacher is the individual who tempers and redirects native impulse with the rational theory of his [sic] craft (p. 8).

Each vocational educator, according to Morris, needs a philosophy of vocational education. At the same time, there is a parallel need and role for a philosophy for vocational education.

Philosophy thus provides a framework for thinking about vocational education. It helps the vocational educator sort out competing alternatives and provides a basis for a final course of action. Philosophy also provides guidelines for practice, contributing to decisions about program development, selection of learning activities, curriculum, goals, resource utilization, and identification of other essential needs and functions in vocational education.

Ultimately, philosophy is defined as a conceptual framework for synthesis and evaluation that represents a system of values to serve as a basis for making decisions that project vocational education's future. Vocational educators cause the philosophy to decide what ought to be—and what ought to be is necessarily different than what is. The tension between what is now done in vocational education and what vocational education ought to be doing is a compelling force for improving practice.

A philosophical view on the nature of the learner determines how learners' needs are determined and suggests appropriate strategies for meeting those needs. When assumptions about learners have been thought through before teaching begins, reasoned responses are likely to guide practice. Without a theory of the learner, practice has to be based on common sense, success of others, teaching as we were taught, or some hodgepodge that carries neither a consistent nor coherent view of learners.

Assumptions about truth ought to guide curriculum building in the school. Truth and knowing what to teach are entwined. The schools have a responsibility to teach truth, and philosophy can build confidence in the truth of the knowledge that is held up as the school's "stock in trade."

The purposes of schools in America should also reflect the assumptions of a philosophical framework. Although it is generally recognized that schools

meet society's need for continuity, philosophy directs attention to alternative ways of determining society's explicit needs and those parts of the stream of continuity held to be of greatest value. It is here that educational philosophy projects the role and nature of vocational education in the system of public education in America. A philosophy for vocational education must exist before vocational education will have a major influence on the philosophy of public education and its future theory development.

Philosophy, then, is not merely an abstraction without relevance for vocational education. A philosophic view of vocational education sets parameters for vocational education: philosophy is a guide for developing policy; philosophy serves as a "yardstick" against which the practices of vocational education can be measured; philosophy provides a conceptual framework for thinking about all of vocational education; and philosophy as a set of assumptions about the human condition is useful in thinking about those very assumptions.

PRINCIPLES AND PRACTITIONERS

Principles of vocational education have been an important force in American vocational education since the early 1900s. The theorems presented by Prosser and Allen (1925) are representative of the positions held by early leaders of vocational education. Barlow (1976a) declares, in referring to the 1906-1917 period, "I hold in great faith the position that all of our basic principles were determined during that period, and that they are as sound for 1976 as they were for 1906" (p. 1). Barlow (1975) goes further by saying, "The system of vocational education postulates that the vocational education movement rests upon a solid foundation of basic principles which do not change with time" (p. 23).

Prosser and Quigley (1949) on the other hand, in revising Prosser and Allen's (1925) original work, *Vocational Education in a Democracy*, points out, "The aims of the original edition remain sound, but the principles, policies, and methods it advocated need to be checked out at intervals against the changing demands on workers and the widening experience of schools in their effort to adapt vocational training to a dynamic economic world" (1949, p. vi). This statement clearly indicates that Prosser, one of the formulators of the early basic principles, did not believe that those principles would remain unchanged throughout time.

The *principles* of vocational education have taken precedence over *philosophy* in vocational education. The yearbook of the American Vocational Association (1974), *The Philosophy for Quality Vocational Education Programs*, says in the opening sentence, "The philosophy for quality vocational education programs is a book about principles, issues, concepts, and

fundamental considerations related to vocational education in general" (p. 2). (Note that philosophy *is not* listed.) At a later time, Barlow (1975) points out:

> At the beginning of the vocational education movement there were no "experts" in vocational education. The principles and practices had to be learned by each person. A philosophy (as the term is used loosely in vocational education) had to be developed. This philosophy consisted actually of an understanding of the basic principles which had been identified between 1906 and 1917 (p. 2).

Careful study of vocational education lends credibility to the idea advanced by Barlow. The principles of vocational education *have been* substituted for a philosophy for vocational education. However, principles of vocational education do not equate a philosophy for vocational education, and the contemporary principles of vocational education should not be substituted for a philosophy. Differences between principles and philosophy are apparent. An examination of the definition for each underscores the differences.

Anthony (1965) offers an insight into a definition for principles. He states, "there is no real difference between a currently useful generalization and a principle" (p. 157). He also points out the difficulty in determining the generality of generalizations and suggests that generalizations have to avoid having so many conditions attached to them that they are no longer generalities. Principles, Anthony believes, are valid when they "have strong support from practice, even though there is no known scientific explanation between cause and effect" (ibid., p. 162). According to Anthony, principles are a guide for action.

Principles of vocational education are defined as generalizations that state a preferred practice and serve as guidelines for program and curriculum construction, evaluation, selection of instructional practices, and policy development. Accordingly, principles of vocational education reflect past successful practices in vocational education, and many, as Barlow points out, have endured from the early days of vocational education, with reinterpretations occurring as a reflection of changing times and needs. These early practices and successful practices of recent years are the basis for contemporary principles of vocational education.

Successful practices in vocational education—those that have endured, as well as new successes—are a primary source for a list of contemporary principles of vocational education. These practices are described in the literature of vocational education published during the last decade. It is this literature

that most frequently contains what vocational educators have to say about their own profession. Because what vocational educators say about vocational education is important in developing a philosophy for vocational education and for validating a list of contemporary principles of vocational education, the writings of the last decade are central to the purposes of this book.

Contemporary principles are as important to the future of vocational education as early principles were to its beginning. However, contemporary principles of vocational education are not the same as the early principles. And where the early principles were substituted for philosophy, the contemporary principles can and should be utilized as a basis for developing a philosophy for vocational education. Principles and philosophy together should guide planning, conducting, and evaluating in vocational education. Ultimately, vocational educators will be most effective in their leadership roles when they base their leadership on a philosophy for vocational education that reflects the contemporary principles of vocational education.

POLICY AND POLICYMAKERS

Policy, the work of policymakers, has an important relationship to principles and philosophy. And although policy is not a primary topic of this book, the principle-philosophy-policy relationship requires attention in this area.

Policy is defined as a set of expectations to be met in the conduct of vocational education. Moreover, it is the set of expectations adopted by public policymaking bodies (i.e., boards and governing groups at the local, state, and federal levels), which suggests appropriate processes and procedures in activities related to vocational education. Policy and law, in some instances, are synonymous—the intent is to create law. However, it has effects similar to policy. Policy, in the final analysis, affects how practitioners discharge their responsibilities to the publics they serve.

The impact of policy is critical in considering principles and philosophy. Principles, representing preferred practices in vocational education, can be implemented only when policy supports those modes of operation. As an example, advice seeking via advisory groups is a preferred practice in vocational education. Unless policy recognizes and permits such groups to be organized and function, the preferred practice cannot be operationalized. Philosophical assumptions have a similar relationship with policy and are subject to many of the same constraints. Policy must align with both the philosophic assumptions and preferred practices of vocational education if the latter two are to influence vocational education in meaningful ways.

Policymakers, then, must understand a philosophy for vocational education. Understanding can lead to reasoned support. Then, and only then, will

policymakers concern themselves with the assumptions of philosophy and base policymaking on a coherent view of vocational education. This, in turn, can lead to consistent policies that encourage practitioners to seek what ought to be rather than just basing practice on what has been.

THREE IN A TUB

Philosophy, principles, and policy are essential to vocational education. It is not desirable to say one is more important than the others. It is desirable—even imperative—to recognize that philosophy, principles, and policy ought to exist in a harmonious and congruent relationship.

Principles and policy now exist in vocational education without an apparent philosophy. Principles are generally acknowledged and accepted by vocational educators. Vocational educators use these principles to encourage policy development; however, policymakers have often enacted policy without regard for vocational education's principles. In part, this reflects the lack of a coherent philosophic rationale to guide the development of a consistent policy.

The principles of vocational education are identifiable and represent generalizations about vocational education. However, principles are somewhat independent ideas about parts of vocational education.

Philosophy is more encompassing than principles. Earlier philosophy was described as a conceptual framework—a way of viewing vocational education. In effect, the assumptions underlying a philosophy help determine the parameters of the field.

Policy is the medium necessary for philosophy and principles to become operable. Without appropriate policy, the correct environment does not exist for conducting vocational education consistent with its philosophy and principles.

Figure 1 shows the relationship of philosophy, principles, policy, and the learner. In one sense, it is an idealized view of how these elements should work together to benefit the learner. Yet it is only a beginning point for what is to follow. It should not be taken as the only way of viewing these elements, nor be taken as a piece of finished business.

Philosophy, represented by the outer circle, sets the parameters for the operation of vocational education. Principles—the small discs inside the philosophical framework—are the preferred practices of vocational education and direct those practices in keeping with the underlying philosophical assumptions. The learner, central in this view of vocational education, is the inner circle and the intended target and beneficiary of the operationalized philosophy and principles. Policy, the darkened area inside the philosophic framework, provides fluidity and sanctions the appropriate implementation of vocational education's preferred practices and philosophy.

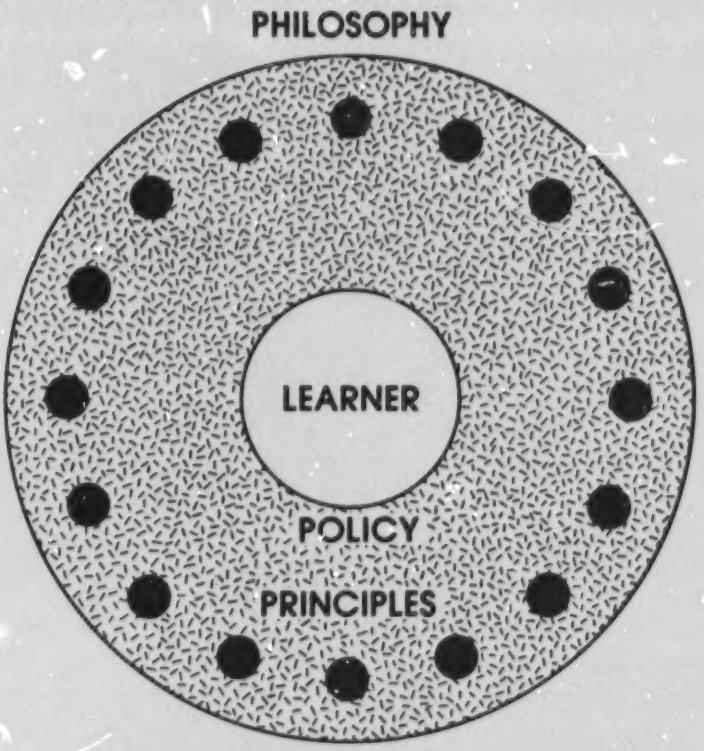

Figure 1. An initial conceptionalization of vocational education.

TOWARD A PARADIGM

Building a paradigm for vocational education requires philosophy. Philosophy, though, is not apparent in vocational education, and some claim that vocational education is void in the area of established philosophy. Regardless of which is the case, a coherent philosophy for vocational education is necessary before a paradigm can be developed.

A coherent philosophy can be developed in several ways. Morris (1961), in thinking of the individual educator developing a personal philosophy of education, describes three methods. These he labels as the "inside-out" (inductive) method, the "outside-in" (deductive) method, and the cultural method. The first two he considers as most appropriate for the experienced educator, whereas the last one is especially suited for those without teaching experience. Logically, vocational education, an endeavor in public education since the turn of the century, can utilize either the inductive or deductive method.

The "outside-in" or deductive method begins with the first step, developing a comprehensive specification of views or assumptions on reality, truth, and value. Morris (ibid.) indicates that the rigor and logic used in developing these views determines the quality of the second step, explicating the educational theory implicit in the fundamental assumptions. The third step describes the teacher behavior, purposes of instruction, and learning outcomes expected to result from the first two steps. Analysis of the first three steps is required to determine where further clarification is needed to ensure harmony and coherence. Then the deduced pedagogical prescriptions and theory are measured against successful practices. Disparities and incongruities then have to be resolved.

The "inside-out" or inductive method starts near where the deductive method ends—with successful practice. The inductive method is like practicing one's way into a philosophy. It begins by identifying successful practices, followed by specifying the educational theory that these practices seem to indicate. From the inferred educational theory, a general outline of views on reality, truth, and value can be extracted. Analysis follows to arrive at a position that shows consistency between practice and the inferred educational theory and coherence with the underlying philosophic assumptions.

To be inductive or to be deductive—that is the question. Deductive processes applied to vocational education require "up-front" agreements on fundamental assumptions about reality, truth, and value. Moreover, up-front agreements involve people—substantial numbers, in the case of vocational education. By contrast, the inductive method begins with a specification of successful practice, and from that base the processes of inferring, analyzing, and synthesizing can proceed. The literature of vocational education is rich

in the preferred practices of vocational education. Thus, the decision to apply the inductive method to developing a philosophy for vocational education is appropriate.

The balance of this book is directed toward inferring a philosophy for vocational education. It is an inductive process and its foundations are rooted in what has been written and edited by vocational educators. It is what we say about ourselves as vocational educators and what we claim for vocational education. The next step is to specify the preferred practices, the principles, of vocational education.

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CHAPTER 2
THE HISTORICAL SETTING AND PRINCIPLES OF VOCATIONAL EDUCATION

A number of issues and concerns surrounded the early development and expansion of vocational education. Some of them—those that seemed to dominate the literature of the day—are developed here. These descriptions are not complete as either history or evidence. However, they are an accurate portrayal of issues and concerns that were central to establishing vocational education in the public schools during the critical groundwork period between 1900 and 1916. The historical background is intended to provide the reader with a better understanding of the dynamics that were working at that time, in order to set the stage for an appreciation of events related to the individual principles developed in chapters 3, 4, and 5.

HISTORICAL CONTEXT

DEMOCRACY AND THE SCHOOLS

Schools in the first decade of the twentieth century largely held to the elements of a so-called liberal education. Preparation for college was the intended outcome—an outcome serving fewer than 10 percent of the population. Liberal education was not concerned with making efficient producers, although it did indirectly contribute to that end; rather, it concerned itself with consuming (Snedden 1910c).

At the same time, opportunities to work were very attractive to those youth who saw little value in further schooling. For those who chose to leave school to enter the work force—and the numbers were large—there had been little or no preparation for work. Fewer than 10 percent of the seventeen-year-olds received a high school diploma (U.S. Department of Labor 1968). By modern standards, 90 percent of the population were high school dropouts or had never attended high school. Typically, youth left the public schools by the age of fourteen, and less than half of these completed the

sixth grade. School attendance laws for persons older than fourteen were just beginning to emerge.

Schools did not adequately serve the needs of youth. The Commission on National Aid to Vocational Education (1914) stressed how public education was falling short. The equality of opportunity in the system of education was not afforded to the mass of children. Although the schools were freely open to every child, the aims and purposes of the schools were such that a majority of the children were unable to take advantage of schooling beyond a certain grade, and hence did not secure, at public expense, a preparation for their work in life. The Commission held that the schools were planned for only the few who were preparing for college rather than the large number who would go into industry.

Advocates of vocational education in the public schools believed that vocational education would make the schools more democratic. "The American school will become truly democratic," said Prosser, "when we learn to train all kinds of men, in all kinds of ways, for all kinds of things" (1913, p. 406). Establishing vocational training as an alternative for those who were leaving schools at fourteen years of age would, it was hoped, vastly extend general education, provide a reason for the continued school attendance of more persons fourteen years of age and older, and democratize education.

Several additional benefits were expected as vocational education became a part of the system of public education. Not only would schools be meaningful for more students, but education for employment would help extend the years of education, thus increasing the level of citizenship of those persons. Vocational education would also make for greater efficiency in production and increase the wage-earning ability of youth—both boys and girls—by helping them move from noneducative occupations as unskilled laborers to positions as skilled workers sought after by industry. Similarly, training in the scientific principles of farming and the household occupations would contribute to greater efficiency in farming and would strengthen the American home (Marshall 1907). It was also believed that vocational training was needed for its indirect but positive effect on the aims and methods of general education (Commission on National Aid 1914). Accordingly, vocational education would develop better teaching processes through which children who did not respond to book instruction might be reached and educated through learning by doing. It would also introduce to the educational system the aim of utility, which would take a place in dignity at the side of culture, and would connect education with life by making it purposeful and useful.

Dewey (1916) saw occupations as central to educational activity. He did, however, express concern about any form of vocational education that

would tend to continue the present forms of education for those whose economical status would allow such education, while giving the masses a narrow education for specialized occupations under the control of industry.

Dewey believed that education needed change. Vocational education could, according to him, be the means to induce changes that would improve education. According to Dewey, a right educational use of vocational education:

> . . . would react upon intelligence and interest so as to modify, in connection with legislation and administration, the socially obnoxious features of the present industrial and commercial order. It would turn the increasing fund of social sympathy to constructive account, instead of leaving it a somewhat blind philanthropic sentiment. It would give those who engage in industrial callings desire and ability to share in social control, and ability to become masters of their industrial fate. It would enable them to saturate with meaning the technical and mechanical features which are so marked a feature of our machine system of production and distribution (1916, p. 320).

Considerable argument, frequently public, existed between Dewey, Snedden, and Prosser. Wirth (1972) treats this controversy in detail and labels Prosser's and Snedden's economic philosophy as Social Darwinism; whereas others have felt that Dewey allowed his socialistic tendencies to obscure some of his preferences (later more evident) regarding schooling. However, the controversy seemed aimed more at why and how vocational education should be developed rather than at the question of whether or not it was needed. The why and how questions are just as important today as they were then, but as a matter of historical record, the evidence shows that vocational education emerged as a result of a real concern for youth and of the failure of the schools to provide an educational program that was both attractive to them and fitted to their needs.

LIFE PATTERNS FOR WOMEN

Several important events stand out in examining the life patterns of women. These include schooling, work, and marriage. Schooling held a greater attraction for females than males. In 1910, 60 percent of all high school graduates were women (U.S. Department of Labor 1968). At the same time, nearly one-third (30.6 percent) of all women between the ages of fifteen and twenty-four were gainfully employed (National Society for the

Promotion of Industrial Education 1907). At the first annual meeting of the National Society for the Promotion of Industrial Education (NSPIE), Marshall (1908) pointed to the work patterns of women in discussing Taylor's (1908) report, "The Effect of Trade Schools on the Social Interest of People." Marshall pointed out that laws in most of the states permitted girls to leave school and enter the industries at the age of fourteen. Further, the national census indicated that all industries except two admitted women as workers, and data indicate that in a large majority of the cities from fifty to eighty percent of the girls between fourteen and twenty worked for wages outside of the home.

Such evidence made it plain to policymakers that the nation could not afford to consider the question of vocational education merely on sentimental grounds (Marshall 1908). Massachusetts census data for 1910 indicated that 60 percent of the sixteen- to twenty-year-old women were gainfully employed, and the same census data showed the national average for that group to be 40 percent (Federal Board for Vocational Education 1920b). Certainly, employment in the workplace was of profound importance in the lives of women.

Marriage for women who entered the work force usually occurred after an extended period of employment. It was a well-known fact that, among factory workers, the great majority of girls began as wage earners when they were fourteen to sixteen years of age; that they continued as such for five to eight years, after which they married; and, if conditions were at all prosperous, they devoted themselves henceforth to homemaking (Snedden 1910). Schools, however, were failing to prepare women for either role—as homemaker or wage earner.

The nature of women's involvement with industry had itself undergone change. Industry had always been important in the life of women, but most of the products of such industry had been produced at home. At the turn of the century, work opportunities for women outside of the home became greater each year. The changing nature of industry also affected what women did and learned. The processes of industry tended to divide and subdivide every operation and simplify the work performed. This in turn limited what was learned in the factory, as well as its application to the needs of the home.

Jobs for women, in spite of their high levels of employment, were limited in variety and scope. Most were low-level factory and manufacturing positions with limited opportunity for advancement. Many were based on piecework rather than an hourly rate, and working conditions were generally poor at best, if not deplorable. Service occupations and some office work provided relatively better circumstances. All in all, women were not usually

encouraged nor prepared to advance into more challenging and rewarding positions.

These events led early leaders to see the need for education of a twofold nature—education for wage earning and education for the work of the home. The early departure from high school for most women, coupled with the lack of opportunity to prepare for a wage-earning role, left women inadequately prepared to cope with the roles they would fill. As Snedden (1910c) commented, "Society will undoubtedly require that the two functions become harmonized, to the end that the welfare of the individual and the soundness of society may at the same time be conserved" (p. 54). Vocational education was seen as an appropriate means of meeting these goals—goals that would themselves shape the future of vocational education.

APPRENTICESHIP PROGRAMS

Traditional apprenticeship programs were affected by the emerging industrial society. Snedden (ibid.) emphasized that it was a matter of common observation that the apprenticeship system in many trades had been rendered ineffective by the disappearance of the old form of industry in its complicated form. The new factory system of production had replaced the total product approach that had been common to many of the apprenticeable trades.

The American Federation of Labor (AFL) recognized the need for industrial education and did not see it as a competitor. Samual Gompers (1914), then president of the AFL, spoke to the eighth annual convention of NSPIE and outlined the union's support for public vocational education. In addressing the issue of industrial education in the schools, Gompers declared, "I can assure you that no disposition will be found anywhere among working men to oppose this effort to make our schools more democratic in serving the real bread-and-butter needs of the community" (1914, p. 7). Gompers, in referring to the committee on education appointed at the 1903 annual AFL convention, went on to say:

> What sort of education do you think most interested the delegates to that convention? It was not that education which deals with the syntax of dead languages; it was not even that education which deals with the development of the fine arts, or with the systematic teaching of the sciences . . . . The sort of education which was under consideration . . . was industrial education (ibid., p. 8).

Trade union women were also adamant supporters of vocational education. Leonara O'Reilly, representing the Woman's Trade-Union League of New York City, spoke to the Commission on National Aid to Vocational Education at one of their hearings. O'Reilly said, "I feel that this piece of work before your committee is the most vital thing in education that has been done in this whole land" (Commission on National Aid 1914, Vol. II, p. 186). Her further comments represent a vivid commentary on education and her perceptions as to changes that needed to take place in the educational systems of the nation.

Organized labor had a vital concern for expanding public education to include industrial education. Such an addition was expected to advance organized labor by increasing wage-earning power and making the schools more democratic.

A WIDESPREAD CONCERN

The movement to see vocational education become a part of the public schools was one that attracted many proponents. On an individual basis, the senator from Vermont, Carroll S. Page, has to be considered among the strongest advocates. Senator Page's contributions are reported by Barlow (1976b) in *The Unconquerable Senator Page:* "Because history sometimes plays queer tricks, as it did in this case, the man who should have received much credit for the vocational education legislation was upstaged by others who received, in a historical sense, a lion's share of the credit" (p. 134).

Senator Page (1912) recognized the public's interest in vocational education. He expressed the widespread nature of that interest to his fellow senators in a speech regarding his vocational education bill, which sought to provide for cooperation in promoting instruction in agriculture, the trades and industries, and home economics in secondary schools. Page warned the senators that when they returned home they would find the question of vocational education the subject of sermons in churches; of earnest discussions in granges and other farmers' associations; as a burning and vital question among labor organizations and manufacturing trades associations; and as the subject of special consideration among those connected with our institutions of learning everywhere, from the elementary schools up to the universities, from one end of the country to the other. Backing up his statement were quotations and statements of support from educators; newspaper editors; labor, business, and farm leaders; and governors representing every state in the union.

Support for congressional action to stimulate the states to provide vocational education through the public schools was in evidence in many organizations. The Commission on National Aid to Vocational Education (1914)

noted this support in their report. Resolutions favoring the idea of stimulating the states to deliver vocational education had been passed by a great many national organizations during the past few years. The Commission's report also cited the Commissioner of Education's (1912) report concerning public opinion favoring vocational education, which stated, "the press fairly teems with editorial and signed articles, which indicate an overwhelming sentiment in favor of enlarging and extending the scope of education in this country to include the training of the great mass of our workers for wage-earning occupations of every kind" (p. 287). The Commission's report then listed twenty-three major organizations representing a cross section of societal interest. The high level of public support forecast the establishment of a national program to promote vocational education. Societal interests dictated such an outcome.

PRINCIPLES

Principles of vocational education emerged as vocational education was beginning in this country. The first principles, advanced as theorems, were a reflection of circumstances, thinking, and needs specific to a time in history. The fundamental concepts behind these theorems were influential in shaping the early development of vocational education. In many instances, these concepts are still evident in contemporary principles of vocational education. In other cases, old concepts have been modified or dropped and new generalizations have emerged.

Historical traces and recent preferences are both influential in establishing a list of contemporary principles of vocational education. Whether by accident or design, history has shaped vocational education. An awareness of the early leaders' intentions can be useful in seeing directions, identifying changes in direction, and synthesizing the impact of those events. By contrast, recent preferences should be the ultimate basis for inductively developing a contemporary philosophic position for vocational education. After all, recent preferences are primary indicators of where vocational education is today.

Evidence supporting individual principles is drawn from two periods—the early 1900s and the second half of the present century. Since the principles are contemporary principles of vocational education, the supporting rationales are largely based on the literature of the 1970s. In some instances, sources go back into the 1960s. Although early roots, primarily prior to the passage of the Smith-Hughes Act, are developed (not all of the principles have such identifiable beginnings), the preponderance of evidence is from the more recent period. The jump from the early part of the century to the

sixth and seventh decades is intentional; the intervening time is left to the chroniclers of history.

Two additional comments are important in reading the rationale for the contemporary principles. The literature cited has been generally limited to what can be described as the hardback literature. By way of contrast, little has been taken from the periodical literature. In an equally exclusive manner, citations represent what has been written or edited by vocational educators. Largely, it is what we have to say about ourselves and what we say about vocational education.

It is appropriate for the reader to ask, "Are these all of the principles of vocational education?" The answer would have to be a qualified no, in terms of the finality of the list over time. And there are other possibilities. The classification may limit the individual's vision regarding applications and alternative views of the role for a given principle. Therefore, it is important to recognize that the individual principles frequently have multiple applications and varying influences on vocational education. It may be equally important to acknowledge that the principles do not *need* to be classified or grouped.

Purely as a matter of convenience and structure, the principles are grouped under three headings—People, Programs, and Processes. These headings are arbitrary, although reasoned. Some will see parallels between these groupings and the philosophical questions dealt with latter. Such relationships are not fully intended. To use that as a scheme for organization poses an unwarranted and unnecessary limitation. Similarly, a few select principles may not have earned full status as contemporary principles of vocational education and consequently may better be labeled as tentative principles—another unwarranted and unnecessary limitation. Regardless of these possibilities, each principle is based on evidence that it is a preferred practice in vocational education and is treated as a discrete subsection of the chapter in which it appears. Hence another caveat. Each principle, although treated as a unit by itself, represents only a partial view of vocational education. Hopefully, the design used in presenting the principles will not limit the individual's gestalt of vocational education.

Principles have served vocational education in a variety of ways. To name a few, principles have been useful in guiding program development, in planning instructional strategies, in evaluating programs, and in formulating policy. It is expected that principles will continue to fill similar roles for vocational education.

In the present instance, principles are being used to arrive at a philosophy for vocational education. The development of a philosophic position for vocational education from the principles of the field is not unlike other uses for principles. Together, such purposes draw on what vocational educators

have expressed as preferred practice in vocational education. These purposes reflect where vocational education has been and suggest future directions. They also require interpretation to the community—educators, vocational educators, and students alike. Furthermore, they are subject to the possibility of change. Finally, they have the potential of being used to bring about improvement in the vocational education enterprise. The larger differences grow out of the more global nature of philosophic activity and the fundamental nature of questions about the human condition that are addressed in the philosophic quest. Yet, the principles of vocational education are central to the process and purpose of inductively developing a philosophy for vocational education. To understand the principles is essential in accomplishing that goal.

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CHAPTER 3
PRINCIPLES AND PEOPLE

INTRODUCTION

The individual is the focal point for the activities of vocational education. It should not be surprising, then, that many principles of vocational education fit within a proposed cluster of principles centered on people. Guidance and placement are concerned with helping people; lifelong learning, needs, and special needs address human issues; "open to all" and sex bias and sex-role stereotyping deal with all individuals; student organizations are about what people do; teachers are people who serve other people; and a work ethic is about what people value.

The "people" label is not a mutually exclusive one. Clearly, guidance can be appropriately considered as either a program or process. A similar statement can be made about placement and student organizations. In fact, it is possible to "fit" the principles into any of the three categories, people, programs, or processes. The fit is more a function of how individuals see each principle rather than a part of some grand, a priori design. In the final analysis, there is nothing sacred about three categories labeled people, programs, or processes. The reader is encouraged to think about possible implications that are broader than the limitations imposed by any attempts to organize, classify, or otherwise label the principles of vocational education.

This chapter discusses the following areas of principles:

- Guidance
- Lifelong Learning
- Needs
- Open to All
- Placement
- Sex Bias/Stereotyping
- Special Needs
- Student Organizations
- Teachers
- Work Ethic

GUIDANCE

THE PRINCIPLE

Guidance is an essential component of vocational education.

AN EARLY CONCERN

Guidance for vocations has been in evidence since the organization of the vocational education movement in this country. Credit for the modern formulation of vocational guidance usually is given to Frank Parsons (Gysbers, Drier, and Moore 1973). Interestingly, Parsons' work centered in Boston at about the same time that vocational education was first being promoted as a national movement.

Though Parsons died in 1908, his posthumously published plan (Parsons 1909) has influenced vocational guidance practice to the present day. Parsons rejected the Darwinistic concept of the survival of the fittest and proposed a guidance system based on a concept of work motivated by compassion for one's fellow worker (Borow 1974). His strategy was to give counselees assistance in making a self-analysis of needs and aptitudes, information regarding the requirements of various occupations, and assistance in matching the information about self with that of occupations. The anticipated outcome of Parsons' approach was that the individual would choose an occupation that best suited that person. The emphasis was on occupational choice.

The close ties between the National Society for the Promotion of Industrial Education (NSPIE) and the vocational guidance movement are highlighted by Borow (1974). He points out that the first national conference devoted to vocational guidance took place immediately before the fourth annual conference of NSPIE in November, 1910. Subsequent national conferences on vocational guidance were held in 1911 and 1912. The 1912 meeting in Philadelphia occurred at about the same time as the sixth annual meeting of NSPIE. It was at the Philadelphia meeting that the guidance group drew up a plan for a national association for vocational guidance and met with NSPIE to discuss and agree on the details of a joint convention of NSPIE and the new association, to be held the following year. Ultimately, the National Vocational Guidance Association (NVGA) was formally established as an independent organization in 1913.

The Federal Board for Vocational Education gave active recognition and support to vocational guidance. The vocational educators' need for information on vocational guidance led to the publication of a bibliography on vocational guidance. The publication (Federal Board 1921) supported a

comprehensive plan of vocational guidance. According to the most ardent early advocates, vocational guidance was to embrace all of the various stages that lead to vocational efficiency. That meant that from the standpoint of the individual to be benefited, the complete plan must include (1) experiencing varying occupational opportunities, (2) making a vocational choice, (3) preparing for the vocation selected, (4) obtaining employment in the chosen field, and (5) making needed readjustment and preparation for change or progress.

As a historical sidelight, a 1938 ruling of the U.S. Commissioner of Education made it possible for Smith-Hughes Act and George-Deen Act vocational funds to be used to support guidance activities through the vocational division of the U.S. Office of Education. Although this ruling gave further impetus to the vocational guidance movement, it may have encouraged, if not supported, the separation that now exists between guidance and vocational guidance. In essence, it identified vocational guidance as a distinct endeavor different from what was viewed by some as academic guidance. That distinction was as artificial then as now.

CURRENT DIRECTIONS

The impact of vocational education on guidance and counseling is significant. Hoyt (1971) acknowledges that vocational educators have insisted on making some financial provisions for guidance in every piece of federal vocational education legislation passed since 1938. He claims that no currently employed counselor, guidance supervisor, or counselor educator connected with high school guidance has a position that has not been enhanced because of support given to the guidance movement by vocational education. In spite of Hoyt's claim, many vocational educators feel that support, for vocational education has been inadequate.

The association of guidance with vocational education is mandated in the Educational Amendments of 1976 (P.L. 94-482). Guidance is the only area funded under the provisions for program improvement in which federal dollars must be spent. The association of guidance with vocational education as a federa mandate is likely to follow the pattern of past federal legislation and continue to be specified in future legislation for vocational education.

The present mandate represents a congressional priority for helping individuals choose. Choice making has been central to the purposes of vocational guidance since its origin. The National Advisory Council for Vocational Education (1968) sees an urgent need for vocational guidance today, as our highly technological society has more than thirty-five thousand occupational titles. The promise of hundreds of new and still unnamed occupations adds to the future need for such guidance. In spite of this need,

Borow (1974) acknowledges that the major resources and energies of guidance have been allocated to academic problems of youth rather than to their career planning needs.

The National Advisory Council's report states the situation in stark terms:

> Almost nine out of every ten high schools in the United States provide academic counseling. In contrast, the occupationally oriented student gets little or no attention . . . . Only a minority of high school graduates who do not go on to college report receiving any vocational guidance (1968, p. 95).

The need for vocational guidance is not currently being met and congressional concern continues.

Understanding of self in terms of vocational alternatives is a primary goal of vocational guidance. There are those who take the position that career choice ought to prevail over career development. Borow (1974) believes that vocational guidance that begins early, is continuously available, and assists in the discovery of opportunities for reality testing in school and community in order to nurture occupational awareness and vocational self-identity, is best for most youth. This notion emphasizes vocational guidance as a process of human development rather than as a single choice-making event.

Guidance as a human development process underlies concepts about career education. Exploration, a part of career education, emphasizes self-understanding as a major goal.* According to Drier (1973), exploration should be stressed in early adolescence as a means of providing individuals with the needed experiences and knowledge to begin internalizing and drawing initial conclusions about self in relation to possible life careers. Hoyt (1972) promotes the idea that career education programs, when properly conceived and implemented, hold great promise for assisting individuals to choose and implement appropriate decisions regarding vocational education.

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*Exploration is further developed in chapter 4.

Information about the would of work is as important as self-understanding in the area of vocational decision making. It is a lack of information that causes potential problems when individuals do not possess sufficient knowledge of possible alternative occupational choices (Pucel 1972).

COUNSELORS

The argument about counselors continues across the nation. As Hoyt (1971) points out:

> There is talk in some parts of the country of creating two kinds of secondary (secondary could be omitted) school counselors—one set of "regular" counselors and one set of "vocational" counselors. Vocational education has nothing to gain and everything to lose if this kind of talk is converted into reality (p. 272).

Hoyt's statement clearly represents a no-nonsense position; however, all of education may have nothing to gain and everything to lose if this kind of talk is converted into reality. Sadly, it has been a reality for a long time.

Considering the principle of comprehensiveness,* there is little room for separate vocational counselors. "At this point in time," says Hoyt, "there is a crucial need for vocational education to *really* become a part of education—not apart from the rest of education" (ibid., p. 273). When counselors are responsible for all aspects of counseling programs, students are most likely to see a full range of alternatives open to their choosing. Hoyt urges maintaining the unity of guidance as an important means to meet students' needs for broad perspectives.

Some believe that only non-college-bound students need vocational counseling. Borow (1974) points out that high school personnel often hold a tenacious but tragically mistaken belief that vocational education and vocational counseling are not only irrelevant to the needs of college-bound students but may even be a distraction from the aims of serious education. Unfortunately, many aspiring students are given guidance on college selection procedures but are denied access to opportunities for learning about the world of work or about themselves as potential workers.

All students have vocational counseling needs. Hoyt (1971) declares that no person deserving the title "school counselor" can abdicate responsibility for discussing possible vocational education alternatives with students.

pt. 5

*The principle of comprehensive education is developed in chapter 4.

Similarly, no real school counselor can afford to think just in terms of opportunities in vocational education. Establishing a dual system of counselors is to ask counselors to act in ways inconsistent with their professional roles and functions.

LOOKING AHEAD

"Career guidance," according to Herr (1979), "has emerged as a major direction for the foreseeable future" (p. 118). The contemporary use of the term *career guidance* is the same as the earlier notions embraced by the terms *vocational guidance* and *occupational guidance*. Vocational guidance, then, is being subsumed under the broader concept of career guidance.

The change of descriptors for guidance reflects the development of theoretical constructs about career development. It also mirrors shifts in sex-role identity, the reemergence of economic insecurity, the rise of career education, and the impact of federal legislation, including the 1976 Educational Amendments. All of these project changes not only in guidance but in educational practice at all levels (ibid.).

Career guidance implies a broader range of concerns than was evident in early vocational guidance. A concern still exists for the individual's potential performance on a set of occupational tasks. Equal focus needs to be given to the knowledge and attitudes held by the individuals who facilitate or impede the choosing, learning, and using of such technical skills. The role of the school counselor has to shift from a passive, reactive one to one that is aggressive and outreaching. Its purpose has to be a systematic education of students in the knowledge, attitudes, and skills that will be required of them at future choice points, in planning their educational program, and in selecting and preparing for work.

The future will create new demands on career guidance. Foremost is the need to give appropriate recognition to the changes in life styles and socioeconomic conditions occurring in our society. Work is changing, and that change is influencing youth's response to ideas of career and vocations (Campbell, Walz, Miller, and Kriger 1973).

Work changes and worker changes together are making career guidance a lifelong process. Future demands will require individuals to have a capacity to acquire occupational information and to direct behavior toward new opportunities throughout one's lifetime (ibid.). It seems clear that career guidance and vocational education have a symbiotic relationship. The good health of one is important to the good health of the other. Guidance is an *essential* component of vocational education.

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LIFELONG LEARNING

THE PRINCIPLE

Lifelong learning is promoted through vocational education.

EARLY PRACTICES

The need to provide training for adult learners was evident in the early development of vocational education. Snedden (1910c), in thinking about problems associated with the development of vocational education, recognized the varied needs that would require attention. Snedden felt it would be desirable to maintain short courses, some of which could be highly specialized in character, for workers already in industries. A person already employed in a manufacturing industry, for example, may desire a short and intensive course in the use of a particular tool or process. Such short courses, according to Snedden, could be part-time or might involve the worker taking a furlough from employment.

Agriculturalists were also recognized as needing programs of continuing education. Snedden pointed out that young men who were farming might desire a six-week or three-month course in some technical aspect of poultry-raising, bee-keeping, and the like. He felt that such short and intensive courses, which were only occasionally available at that time, were exceedingly valuable.

Education for adults was held by some to involve more than short courses. To these persons, schooling was envisioned as a lifelong process. Philander P. Claxton (1912), U.S. Commissioner of Education and a proponent of this concept, said, "I believe the time will come when the school day will be two or three hours long and no longer and that the child will begin school at four years of age and continue until he is eighty and that there will be three hundred days in the school year" (p. 50).

Part-time schools were recommended by the Commission on National Aid to Vocational Education (1914). The Commission's report cited the large number of persons between fourteen and eighteen years of age who left school to enter employment. The report pointed out that many of these persons lacked the schooling necessary for successful wage earning or intelligent citizenship. Such young people were neither prepared to choose a vocation intelligently nor to follow it with reasonable prospect of advancement. The schools had not assumed responsibility for these persons' preparation for employment before they became wage earners and neither did the schools offer continued training through part-time schooling after people joined the work force.

Continuing education for employed workers was a high priority to the Commission. Although the Commission stressed the importance of providing preparatory vocational training for every boy and girl who could afford to spend a year or two in school beyond that required by law, the concern was to provide for the large number of children whose education was terminated by entrance to the work force and whose only prospect for further education was dependent upon the education being tied to employment.

Continuing education, according to the Commission, had two major purposes. First, part-time schools should provide for increasing the general intelligence for young workers and lead to better citizenship. A second purpose should be to increase the workers' industrial intelligence and skill, thus leading to advancement or preparation in another line of work that would provide more favorable possibilities (ibid., p. 52).

Home economics was also considered an important aspect of the part-time schools. The Commission recognized the lack of in-school preparation in homemaking. Accordingly, "home economics courses for girls who are employed in any line of industry" should be considered as a possibility in part-time schools (ibid., p. 53).

Opportunities for continuing education were included as a major recommendation. The Commission recommended that no less than one-third of the money appropriated to the states for the salaries of teachers of trade and industrial subjects be expended on part-time schools, as the Commission believed that states should begin at once to deal with this important matter.

The Federal Board for Vocational Education (1918) sustained the emphasis on continuing education. One of the early publications of the Federal Board dealt with part-time instruction in industrial education. As stated in the forward to the publication, "It is doubtful, from the standpoint of securing the rapid and effective training of the industrial workers of this country, whether any other problem is so important as that of extending the scope of workers who have left school inadequately prepared for any industrial pursuit, or even for assuming the duties of citizenship" (p. 5).

The Federal Board also endorsed part-time classes for women. Although the aforementioned publication was written with the training of men for trades and industries in mind, practically all the principles were applicable to the training of women in home economics and in trades and industries. At that time, the bulk of the work that was given in part-time schools for women was of the general continuation type, primarily for homemaking and without regard to advancing women in wage-earning occupations. The Federal Board's publication emphasized that the wage-earning period usually preceded the homemaking period for women and that it therefore would be very desirable for state and local authorities to give careful atten-

tion to the possibilities of training women for wage-earning occupations, especially in trade preparatory and trade extension classes.

A CONTEMPORARY VIEW

The early stimulus for part-time and continuing education in vocational education did not result in a strong commitment to adult education. The Panel of Consultants on Vocational Education (1963) reported the continuing need for adult education. The Panel viewed education for occupational competency as a lifelong process starting when one acquires the first basic skills and concepts and ending only upon quitting a last job. The Panel emphasized that the need for new skills was especially great in a period undergoing rapid technological change; and that educating persons in the labor market—youth and adults—to help them meet changes in their present jobs or to prepare for new jobs, is also an important phase of the total program of vocational education. The overall finding of the Panel was that such vocational or technical education was *not* then available to many young people and adults.

By the end of the sixties, the need for adult education in vocational education still existed. The Advisory Council on Vocation Education (1968) reported that many states did not provide post-high-school youth and adults with an opportunity for vocational instruction. The Advisory Council pointed out that some states and many communities had long offered excellent programs in adult education, but that, in general, adult education was slow to develop in most parts of the nation.

Adults are willing to enroll in programs of lifelong learning. Cross (1975) indicates that increasing numbers of people beyond their twenties are entering postsecondary programs. According to Cross, these individuals desire to enter new occupations, to receive additional training for advancement in present positions, or to enter the work force for the first time. Earlier, the Advisory Council (1968) cited evidence that suggested that people would spend more time in continuing their education if the courses related to specific job requirements. Yet most programs of continuing education were neither sufficiently broad nor extensive to meet this need. It seems valid to conclude that many adults hold a positive attitude toward lifelong learning.

Promoting a positive attitude toward the need for lifelong learning is important. Educators must be among those who promote and help develop the concept of lifelong learning. The attitude of educators is influential in shaping learners' values. Vocational educators need to strive to establish positive attitudes toward learning as a first step in accepting the need for and seeking out lifelong learning.

Educators have not fully accepted responsibility for continuing education. As pointed out earlier, more adults are willing to participate in adult vocational education programs than current opportunities provide. The Advisory Council (1968) also stressed how many leaders in education have failed to recognize the importance of vocational education for employed persons and have failed to promote its development. A lack of initiative and imagination in exploring new occupational fields has tended to restrict program offerings to only those commonly provided in the past.

Vocational educators have also been called on to serve the needs of disadvantaged adults, whose needs are similar to those of other adults. Vocational educators must have a desire to serve clients and a willingness to explore new ways of conducting the educational enterprise. Role concepts need to be restructured, as vocational educators cannot afford to be identified as mere suppliers of training. Rather, their role must be to help people solve their problems. Vocational educators have a potential for performing a unique function with the disadvantaged adult (Cornett and Elias 1972).

Public acceptance of adult education is important. Without taxpayer support, lifelong learning opportunities will be limited and only the financially able will be likely to participate. As Venn (1964) points out,

> "Public education available to all" has been a cornerstone of the educational policy of the nation. Now "continuing education available to all" must be made an equal part of this nation's educational policy (p. 168).

Public acceptance of responsibility for adult education is growing. During the past ten years, postsecondary vocational-technical education has gained stature in the thinking of many persons and has helped demonstrate that a college degree is not necessary in many respected occupations. As a result, more and more workers now feel a need for adult education.

Vocational education for adults is becoming a high-priority item. Although preservice vocational education is essential and necessary, it does not improve the proficiency of those now employed. According to Bundy (1972), inputs in adult education are capable of producing immediate outputs by workers. Such outputs stimulate both workers and employers who, in turn, stimulate the national economy. Understanding and appreciation of the importance of adult education to the 100 million workers in this country are needed by all educators, governmental officials, and lay leaders.

Change is a key factor in lifelong education. Change may outdate present skills, create new demands on the individual, and present new opportunities for individuals. Evans (1971), in discussing change vis-a-vis career ladders

and lattices, indicates that education has two roles to play for adults in helping them move from one career ladder to another:

> - It should serve an instructional function which enables the person to utilize his [sic] past experience wherever this will be of value in the new career, and it should provide instruction at a significantly high level so that as a person moves to a new career ladder, he is not forced to drop back to an entry level wage.
>
> - It should serve a validating function by certifying to prospective employers that the graduate, whether youth or adult, has the necessary skills, knowledge, and attitudes to succeed in the new career (p. 38).

Individuals then must be stimulated by change to take action or stand in danger of being victimized by it.

Technological change is a major force in society. Changes in technology create a "domino effect" on the workplace, on the home, and on the individual. As Bundy (1972) points out, it is new technology and cybernation that place new demands on workers. The world in which we live requires each adult to update knowledge and skills frequently. Workers are limited in advancement and pay by their levels of competence. It is possible for individuals to remain on one job so long that they become narrow and uncreative in their thinking and thus unproductive in their work. Performance tends to reflect the extent to which workers have abandoned traditional, out-of-date practices and acquired new knowledge and skills.

Venn (1964) also believed that technology creates demands for additional education. The dynamics and rate of technological change support the concept of lifelong education. As technology upgrades the skill and knowledge requirements of jobs, education will no longer be confined to the traditional twelve, fourteen, or sixteen years of formal schooling.

People naturally develop new desires and seek new expressions of self—changes based on the experience of living. The periodical literature contains much evidence of people exchanging one work role for another. Such "second acts" frequently are passages from high-pressure positions to roles that are less demanding. Men have, in some instances, given up the breadwinner's role to become househusbands; and women have reentered the work force as second-income producers after their small children enter school or older children move away. The variety of second acts is almost unlimited.

Each, however, creates its own special need for education. Each adds its own presence to the existence of lifelong learning.

> Continuing education has become necessary for everyone. The nation's educational system must develop new ways whereby any individual may obtain additional general education and new occupational skills regardless of previous education or occupational competence (Venn 1964, p. 159).

The demographic shift in the age groups, with older adults representing a major cohort, is a historic fact in our nation. It, too, will add to the demands placed on the educational system and especially on vocational education. Lifelong learning must be promoted by vocational educators together with all others in the education professions.

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NEEDS

THE PRINCIPLE

Needs of the community are reflected by programs of vocational education.

INDUSTRY AND BUSINESS

Providing for the needs of industry was central in the development of vocational education. While there were various reasons for developing vocational education, it was the workplace, with its needs and demands, that held sway over program development. The Commission on National Aid to Vocational Education (1914) recognized the constantly increasing demand upon industries for more and better goods, as well as the diminishing supply of trained workers. Low outputs increased cost of production, and stationary or diminishing wages (as measured by their purchasing power) were seen as negative results. In addition, the products of factories were not of the same quantity and quality as in the past. High prices were believed to be due, in part, to inefficient labor and low profits. The Commission believed that inaction would mean the promotion of poverty and low standards of living and a general backwardness in industry.

Representatives of labor saw vocational education as a necessity for good industry. A statement by H. H. Rice, president of the National Metal Trades Association, to the Commission put the matter succinctly:

> The need for vocational education in the United States is very great. The future industrial efficiency of our nation and the welfare of its workers can be tremendously advanced by a thorough system of vocational training (ibid., p. 20).

At the same time, labor leaders were concerned that vocational education should not overproduce skilled workers. Too many workers, according to Samuel Gompers (1914), president of the AFL, would neutralize the benefits of vocational education. He felt that industrial education should maintain a fair and proper balance between the supply of labor and the demand for workers in every line of work. The only way to avoid injuring labor under the name of industrial education would be first to determine the demand for labor in a community. Industrial education, Gompers held, should be based on a survey of the industries of the community; that is, upon an accumulation of facts regarding employment in the community.

The lack of preparation for work also had a negative influence on the worker. W. C. Redfield, U.S. Secretary of the Department of Commerce, presented a case to the Commission for seeing human needs as well as industry needs. Redfield (Commission on National Aid 1914) pointed out that there was hardly a factory in the country were the problem of untaught and untrained people was not a curse. He felt that it worked all sorts of harm, including harm to the person's self-respect. The untrained person, although willing to work, would not know how to do so and would thus be ashamed, according to Redfield. He saw the situation as degrading to the self-respect of people who would take pride in good work, if only they knew how to do the work.

Labor market needs continue to be important in contemporary programs of vocational education. Swanson (1971) lists criteria for effective vocational-technical education. Of the ten criteria listed, seven have direct implications for the people in the workplace. A central notion in these criteria is the fact that vocational education has very little, if any, value to the individual, the community, or to the economy unless the skills that are learned enable people to get and hold jobs. Learners must be able and willing to perform services and produce products that are in demand in the labor market. Cross (1975) further indicates that the needs of the nation's labor force should dictate the programs provided by vocational education. Preparing people for work is what vocational education is all about.

Vocational planners urge that labor needs and the labor market be considered in planning for vocational education. According to Stevenson et al. (1978):

> It is a mistake to train people for jobs that are not available. This can and does happen on occasion when a state or school district looks at only "what people want" (p. 121).

The mandate for considering labor needs is reinforced by P.L. 94-482, which says, in the declaration of purposes, that it seeks to provide vocational education that is realistic in the light of actual or anticipated opportunities for gainful employment.

As with the first legislation, current concerns include more than labor needs. The planning focus at the local level has changed over the past fifteen years, from one of expanding skill development programs for specific occupations to consideration of: (1) labor needs and job opportunities; (2) the educational and economic needs of the people to be served; (3) the economic characteristics of the area to be served; (4) the determination and justification of higher than average costs of programs for certain populations; (5) the elimination of sex bias and sex role stereotyping; (6) the coordination of

labor, vocational rehabilitation, special education, and vocational education; (7) evaluation of the success program participants have in employment; (8) information and data handling systems with the capacity to respond to both strategic and management control planning; (9) energy education; and (10) student services, including financial aid, work study, guidance and counseling, placement, testing, and assessment (Malinski et al. 1978). These must be viewed as necessary parts of the planning needed to maintain, improve, or justify vocational instructional programs at the local level.

While labor needs are important, human needs are also important. As Malinski et al. (ibid.) point out, people needs in terms of economics, education, community, equality, success, and special and supportive services are of consequence in planning for vocational education. Stevenson et al. (1978) also stresses the urgency of looking beyond labor needs to the needs of people.

Recent federal legislation for vocational education stresses the importance of human needs. Mangum (1971) points out that, according to the declaration of purposes in the Vocational Education Act of 1963, the priority objective will no longer be training for specific skill categories, but rather preparation of various labor force groups for successful employment. The significance of this change from the past was greater than was at first apparent. The test of the appropriateness of training was no longer to be, "Was the skill in high and growing demand?" but "Did the individual get the job of his or her choice and prosper in it?"

The difference was a matter of emphasis. Training for successful employment was the primary goal, and meeting skill requirements was a means to that end. The emphasis of the 1963 legislation has been carried forward and made even more explicit in the 1976 act. People are as important—really more important—than the jobs they may fill.

Makeup and representation on local, state, and federal advisory committees required by the Vocational Amendments of 1976 (P.L. 94-482) recognize the special character of the nation's problems and vocational education's role in solving those problems. Special populations and public and private agencies that affect human needs are to be included in the advice-seeking mechanisms required for vocational education. In similar ways, the data collection and reporting processes provided in P.L. 94-482 are a further recognition by Congress of the importance of human needs in vocational education programs.

Community is an important concept in looking at needs as a basis for vocational education. The time is long past when educators can limit their notion of community as one synonymous with district boundaries. Mobility is a critical factor in thinking about community.

The mobility issue involves data, philosophy, and practical politics. According to Mangum (1971), one in each fifteen American families moves across county lines each year. An even larger proportion of young people, at about the time they enter the labor market, move to another area. Vocational educators must be concerned not only with occupational skills that will be in demand in the home community, but also with what occupational opportunities are available elsewhere and how to project the proportion of youngsters who will be mobile.

Ultimately, there is a need to promote a larger idea of community. To be provincial in determining needs is to limit unnecessarily people who seek to learn. The practical political question ultimately concerns the willingness of local taxpayers to support training that may not be used locally and may even encourage migration from the area. If learners and people are a primary concern, the idea of community can be expanded through the efforts of vocational educators.

Understanding the variety of needs related to vocational education programming is not an easy task. A sense of balance must be sought. Labor needs are on one side; on the other side are the needs of people. Society serves as the fulcrum. Vocational educators can swing the balance that causes either side to lose sight of the other, as well as of the sense of levelness that is important in a dynamic and changing milieu. The needs of the community must be reflected in vocational education.

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OPEN TO ALL

THE PRINCIPLE

Vocational education is open to all.

DEMOCRATIC EDUCATION

Education for all was foremost in the early arguments for establishing vocational education. The public secondary schools were serving fewer than 15 percent of the school age population at the turn of the century, and vocational education was intended to provide programs for those not then being served by the public education system. The liberal education of the early 1900s, especially at the secondary level, was neither liberal nor liberating for the masses who did not attend school beyond the sixth grade.

Democratizing education was a goal of early proponents of vocational education. As pointed out in the discussion of the principle on comprehensive education, Prosser, Snedden, Dewey, and Gompers were among those who held that vocational education had the potential to make public education more democratic. Public education that was truly democratic would serve the needs of a large segment of the population—not just those preparing for college. Education for work would encourage more persons to remain in school longer. As a result, preparation for citizenship would be extended and future workers would find greater opportunities in industry.

Vocational education is intended to serve people of all ages. Until legislation for vocational education was proposed, little consideration had been given to providing education for adults. The Commission on National Aid to Vocational Education (1914) made clear the need for part-time and evening classes for employed workers. The Commission recommended that, so far as part-time schools for young wage earners under eighteen were concerned, national aid should be given for teaching in any subject designed to enlarge workers' civic or vocational intelligence. Evening trade and industrial school programs were to be supplemental to the daily employment of the students. Prosser and Allen (1925), in comparing the scope of service for general and vocational education, summarized the purpose of vocational education in this manner: "Serves all groups—all ages" (p. 210).

THEORY INTO PRACTICE

Access is foremost in any discussion of education that is to be open to all. As Burkett (1971) points out, the Vocational Education Amendments of 1968 declare the act's overall purpose to be that of providing vocational

education opportunities, so that, in essence, all persons "will have ready access to vocational training or retraining which is of high quality, which is realistic in light of actual or anticipated opportunities for gainful employment, and which is suited to their needs, interests, and ability to benefit from such training" (p. 35). The Amendments of 1976 (P.L. 94-482) contain the same wording in their statement of purpose.

When access does not exist, vocational education cannot be considered as open to all. Data indicate, however, that half of high school freshmen want vocational education, but only one-fourth of them can be accommodated. Evans (1971) projects that the proportion of students who want vocational education is almost certain to increase more rapidly than the supply of available instruction. Burkett (1971) believes that it is not possible to measure the gap precisely that exists between the availability of vocational education opportunities and the number of persons who should have such opportunities. However, the estimate is that a minimum of seventeen million people need access to vocational education in addition to the nine million now in such programs.

Governance and facilities are also access issues. The arrangements under which vocational education is administered, the type of facilities in which it is provided, and the location of those facilities all influence access to vocational education. The *National Study of Vocational Education Systems and Facilities* (1978) reveals the diversity of state and local governance systems together with the extent to which various types of facilities are being used in providing vocational education. In this latter area, federal legislation influences how actual facilities are constructed to increase accessibility for handicapped persons. Clearly, governance and facilities both deserve attention as vocational educators attempt to ensure that vocational education programs are conveniently available to all learners.

Practice certainly has not kept pace with the need. Yet, one of the basic tenets of vocational education is that the public schools provide, as part of the education of each individual, an opportunity for that individual to acquire the salable skills necessary to get into and advance in an occupation of personal choice (Barlow 1974). Vocational educators currently realize that it is ambitious to equip all persons to earn a living and that this goal is as yet unrealized (Cross 1975). The goal will remain unrealized until vocational education is open to all in practice as well as theory.

Community colleges have provided a model for public education to emulate. The open-entry/open-exit concept adopted by many community colleges demonstrates how education can serve people. Accepting a person for enrollment and permitting—sometimes encouraging—work entry before program completion communicates a positive image about vocational education. The needs of people are placed ahead of dollars, based on full-time

equivalents and program completers. Access to vocational education occurs because of the educators' capacity (1) to accept people regardless of previous education, diplomas, degrees, or certificates, and (2) to help them meet the demands of the workplace.

Access to vocational education is parallel to the need to work. Loftis and Ray (1974) comment on how the goals of education have stressed the importance of preparation for work. There is little doubt that work occupies a central role in the life of the individual. Work is expected of individuals, and when one does not work, there is a feeling of alienation. Access to preparation for work is a first step in ensuring that the need to work is fulfilled and in removing a cause of alienation.

The need for work and preparation for work is being accepted by youth and adults in our contemporary society. Beaumont (1971) reviews studies that show that 80 percent of all youth entering the labor market without a baccalaureate degree have emphasized the need for vocational education. Further, our technical society demands an educated work force; there no longer is a place for muscle without intelligence. Larson (1971) also believes that citizens in the United States are coming to a fuller realization that it is both a wise educational policy and a wise economic policy to prepare every youth and adult for a job. Economic burdens and the social costs caused by unemployment are staggering problems that threaten our society. If we teach individuals how to work and provide each person with employable skills, knowledge, habits, and attitudes in keeping with the needs of employers, the costs of welfare and institutional care should diminish.

In spite of this recognition of the need for preparation for work, dualisms exist about vocational education. "Vocational education is all right for someone else's children," say parents. Vocational teachers declare, "I'll teach anyone as long as that person is not a troublemaker, handicapped, or disadvantaged." Klaurens (1975) puts the issue very well: "The principle of equality of opportunity always has been associated with education, but few would agree that it has been adequately applied in the schools, despite the good intentions of educators and those who influence education (p. 314). Removing the dualisms will help make vocational education open to all.

Change must be effected in all areas if schools are to accomplish the goal of equal educational opportunity for all. One area of critical importance for change is teacher and counselor attitudes and behaviors. Affirmative action policies are important, but the overt and covert behaviors of teachers and counselors determine the outcomes. The behaviors of teachers and counselors are, in part, reinforced or cultivated by professors in the colleges and universities attended. Increased emphasis on behavioral change must be established at this level. Role modeling can be a most potent mechanism for

socialization, in both the schools and society, and educators must be made more aware of its value (Duxbury 1975).

Sex equity and sex-role stereotyping are areas in vocational education that are currently undergoing change. While the preferred practices related to this area are treated as a separate principle in chapter 3, they merit mention here. Sex equity and sex-role stereotyping are related to vocational education's openness to all. The Vocational Education Amendments of 1976 (P.L. 94-482) mandate that states create programs and provide resources to reduce inequities and stereotyping based on sex. Until the attitudes of vocational educators reflect a willingness to accept any person, regardless of sex, in any program of vocational education, there is room for change.

Change is often a painful process. Schools, however, are perhaps the second most influential institution in our society, and must demonstrate vigorous, progressive leadership. It is not only necessary in order to provide equal educational opportunity for all of our citizens, it is the law of the land. And so law becomes an additional motivator to fulfill the promise of vocational education as the provider of passage from school to work—the education that prepares individuals to be productive in a society that still identifies people largely by the work they do—a passage that, by principle, is open to all.

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PLACEMENT

THE PRINCIPLE

Placement in the next step is a responsibility of vocational education.

BUILDING A BRIDGE

The transition from school to work has not been easy for the youth of America. At the turn of the century, transition was not a process, it was an event. Youths quit school and went to work. School was not preparation for work, nor did it provide a direct connection to the world of work.

Vocational education was designed as a linkage between school and work. Preparation for work was a highly visible goal of the early proponents of vocational education. The assumption seemed to be that persons who were prepared through vocational education would find jobs, and that this could occur because of the requirement that part of such education take place in a productive and practical setting. Regardless of how a job might be obtained, vocational education was a necessary linkage that would fashion education and work into a continuum.

Placement was accepted as a responsibility by some early vocational educators. According to Snedden (1920), "Vocational schools in general, in more or less organized forms, offer vocational guidance and act in a measure as employment agencies in placing their graduates" (p. 581). In discussing how some schools carry out the guidance function, Snedden indicated that an employment agency was maintained for young persons in day or evening school, to assist them to obtain work in suitable occupations. Placement in the work setting then helped strengthen the passage from education to work.

COMPLETING THE JOB

Job placement is frequently considered a critical part of vocational education. Leighbody (1972) claims that vocational educators are nearly unanimous in accepting job placement as a responsibility (though some would argue that we haven't been all that accepting). The placement of graduates in the occupations for which they were trained is considered a tangible measure of the success of the vocational educational process. In 1962, the report of the Panel of Consultants on Vocational Education indicated that the acid test for vocational education is the degree to which its graduates are employed in the occupations for which they are trained. However, the major

emphasis on organized job placement programs as a part of vocational education occurred in the second half of the century.

Struck (1945) provided early leadership for the placement function as a responsibility of vocational education. "Vocational guidance, try-out experiences, placement, and follow-up services," declared Struck, "deserve the fullest possible cooperation and support of teachers and others in vocational education" (p. 136). Venn (1964) added his support for the placement function, although he saw it in a broader perspective. He felt that high schools should become the community institution providing educational guidance, job placement assistance, and counseling services for all high-school-age youth in the school district, whether they were in school attendance full time or not.

The Vocational Education Act of 1963 brought the matter to a sharp perspective. This act required every cooperating state, as a condition for receiving federal funds, to enter into cooperative agreements with respective state systems of public employment service in order to aid in the task of placement of vocational education students. The 1968 Amendments to the Vocational Education Act of 1963 went one step further to help bolster the performance of placement by specifying the use of federal funds to aid persons in employment in vocational areas. Congress, in adopting these amendments, left little room to question its desire for job placement to be included as part and parcel of the vocational education system (Smith 1974).

The amendments followed the recommendation of the Advisory Council on Vocational Education (1968). This group recommended that the definition of vocational education be expanded to include responsibility for initial job placement. In making this recommendation, the Council drew on research, which clearly indicated that vocational schools that accepted responsibility for initial job placement of their students were far more successful than comparable schools that had not accepted that responsibility. The Council went on to point out that two important factors apparently operated: (1) schools that place students soon stop preparing students for nonexistent jobs, and (2) feedback from employers and graduates makes the schools quickly aware of deficiencies in their training programs. Public Law 94-482 recognizes placement services for students who have successfully completed vocational education programs as a part of the scope of basic grant monies, if such is necessary due to inadequate funding from other programs providing similar services.

Suitable job placement must be an integral part of the vocational education program for students planning to enter the labor force upon leaving school. It has been recommended by the National Commission on the Reform of Secondary Education (1973) that secondary schools establish an employment office staffed by career counselors and clerical assistants.

According to the recommendations, the office should work in close cooperation with state employment services. Further, agencies certifying counselors for secondary schools should require such counselors to show experience in job placement as a condition for granting initial certification. The foregoing recommendations add a further dimension to the need for placement services as a part of the public schools. There is a need for counselors who are prepared to carry out this function. It is not incidental to the requirements of the counselor's position.

Job placement is more than a demonstration of program success—it is moral commitment. Learners make an investment in their future by participating in a program of vocational education. As a result of their investment, learners have every right to expect assistance in job placement if they choose to seek employment. Placement of youth and adults who successfully complete preparatory vocational education programs in appropriate employment is both a legal and a moral obligation of all those who develop, install, and operate such programs (Smith 1974). In fact, the moral integrity of the profession of vocational education is blemished whenever this purpose is not achieved. Further, such moral integrity is esteemed in direct proportion to the degree placement is accomplished.

According to Miller and Budke (1972):

> Job placement is the logical outcome of vocational education, and schools providing this service achieve these goals:
>
> 1. Meet their responsibility to all vocational students, graduates, and early leavers.
>
> 2. Complete the bridge between school and work.
>
> 3. Provide initial evaluation data about program pertinence to employer needs (p. 281).

An alternative placement for vocational students resides outside of the job market. Public Law 94-482 (Section 195) recognizes that additional preparation for a career requiring other than a baccalaureate or advanced degree is within the definition of vocational education. It has been only in recent years that an alternative target has become acceptable and as respectable as actual job acquisition. Smith (1974) points out that, although there has been belated acknowledgement of this alternative, it does represent a reasonable outcome, whether such placement be in public or private institutions or in training programs conducted by public or private enterprise involved in the actual production of goods or services. Smith goes on

to make a very important point: Such an option should dispel forever the myth that vocational education locks participants into a dead-end career track and that selection of the benefits of vocational education automatically precludes matriculation to college.

The duality of placement options is also recognized by others. Coster and Poplin (1978), in discussing goals and evaluation, state, "The goal of employability requires first that any student who leaves the public school system at any point is prepared either to enter a job or is prepared for the next level of education, or both" (p. 245).

It seems reasonable to conclude that placement in the next step is a responsibility of vocational education. Regardless of how reasonable such a conclusion may appear, or how inevitable it may seem, there is a gap between purpose and performance. Throughout the United States, in all occupational areas, and in all types of vocational education agencies, the assessment of placement performance discloses a degree of malfunction that is unacceptable if not actually malfeasant. When hundreds of local educational agencies cannot account for the location of one-third or more of their current vocational education graduates, and when local, state, and national official placement statistics continue to identify significant disparities between numbers graduated and numbers placed either in employment or in a higher level of training, then those who are responsible for the ultimate and cumulative accomplishments of vocational education have been other than scrupulous (Smith 1974).

Placement for students who participate in vocational education represents a next step. That next step can be job entry or it can be further education. Both are acceptable; neither is given priority. The purposes and needs of the learner provide a basis for what the next step is to be. The important event, then, is to ensure that assistance in making the next step is provided for students of vocational education. Placement in the next step is a responsibility of vocational education.

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SEX BIAS/STEREOTYPING

THE PRINCIPLE

Elimination of sex bias and sex-role stereotyping is promoted through vocational education.

EARLY VIEWS

Questions regarding the proper education of women were evident in early discussions about vocational education. Regardless of the attitudes held by society regarding women's work, it is clear that early leaders of the vocational education movement were concerned about delivering appropriate vocational education for women.

Women of the day were not expected to work outside of the home, once married. There were, however, stressful economic conditions that could require women to seek remunerative employment. It was accepted as a contemporary standard that many women would work in industry after leaving public schooling and prior to marriage. Snedden (1910c) acknowledged that women must be prepared for two careers, the first of which continued for a few years, the other of which was prolonged and for which a proper education was highly desirable. The first was in the workplace, and the second was in the home.

An early bulletin of the National Society for the Promotion of Industrial Education echoed Snedden's statement. In it, Marshall (1907) indicated that the educator is confronted with a twofold problem where woman's education is concerned: (1) opportunity must be given for women who will never become wage earners to gain a knowledge of industrial conditions and processes through an introduction of technical and scientific schools and courses; and (2) opportunity must be given to women who will be obliged to become wage earners at an early age to receive training that will enable them to enter some specific industry where continued development is possible. In short, greater opportunities for the study of industrial problems and understanding industrial conditions should be made available to girls who had the time and means to devote to such study. At the same time, those who had neither time nor means to remain in school, because of the pressure of earning a livelihood, should be enabled to prepare for the skilled industries to help ensure increased efficiency.

Marshall was one of two women members of the Commission on National Aid to Vocational Education. Her statements and questions as a member of the Commission reveal her belief in the dual preparation of women as wage earners and homemakers.

All women of the day did not agree with Marshall's position. Her exchange with Leonora O'Reilly, Women's Trade-Union League, at a hearing of the Commission is worth noting. Marshall said:

> We hear on all sides, "These girls are not going to remain at work for wages; they are soon to marry, and therefore their vocational training should be along the line of home making."
>
> Miss O'Reilly. Home making—I think homes are made by men and women, not by women, and if that is a preparation, then the training of boys and girls should be the same. That is, do not let us everlastingly put the girl off in a corner making bows when she might make a much better carpenter than the boy. Forget, if you can, in education for a while that this is a female and that is a male. Here are people with hands to be made useful in order that they may do things. If a girl can drive a nail better than a boy, don't call her a tomboy for doing it. That is the way we twist these things. And if a boy can sew on a button better than a girl, why, let him sew on his buttons (Commission on National Aid 1914, p. 195).

The Commission's final report seems to be free of sex bias. Several statements stand out in support of this observation. In regard to homemaking, the Commission reported:

> The investigations made by the commission show that the States are not only fully awake to this need, but that, so far as the towns and cities are concerned, general training for the home is being rapidly developed in the states, so that it seems reasonably certain that this work, in the absences of national grants, will not be neglected.
>
> The Commission recognizes, however, that aside from general training for the home, there are numerous callings in which women are engaged which are based upon a knowledge of home economics, such as that of the dietician, the cook, the housemaid, the institutional manager, and many others. These require a highly specialized training, and the Commission has therefore deemed it advisable in proposing grants for industrial education to so define the use of that term as to include training for such callings.

> Because of the universal importance of this subject, the Commission has deemed it advisable to include teachers of home economics in its proposed grants for training teachers in vocational subjects.
>
> The Commission has also recommended that, by a plan hereinafter described, the work already done by federal agencies in making studies, investigations, and reports in the field of home economics be extended (ibid., p. 41).

The commission's recommendations reflected a concern for the education of women. The Commission, however, did not recommend grants for teachers of home economics, as they believed that this area of need was being attended by the nation's schools (rural areas excepted). The Commission saw the farm home as an integral part of successful agriculture; therefore, the work of the farm and the farm home should be treated in a like manner. The shortage of properly prepared teachers of home economics was an urgent problem, according to the Commission, and was deserving of federal grants. Including home-economics-related occupations with industrial education was reflective of the times—women worked in factories, as did their male peers.

The Commission's position was farsighted in many ways. Yet, in many respects, it mirrored societal thinking. Sex bias and sex-role stereotyping were not issues of the day. In retrospect, the freedom of women to engage in work that later carried the label of "man's work" became more restrictive with the passage of time. One example illustrates this point.

The presence of girls in vocational agriculture is generally thought to be an innovation of the 1960s. However, according to the *First Annual Report, 1917-1918*, of the Colorado State Board for Vocational Education (1918), an eighteen-year-old junior girl at Fort Morgan High School raised five acres of potatoes while enrolled in vocational agriculture. This crop, raised under irrigation, yielded 1,833 bushels of potatoes, which were valued at $2,200. The student realized a net gain of $1,506.35 and earned one unit of high school credit for her supervised farming activity.

EMERGING ISSUES

Was there a concern about sex bias and sex-role stereotyping in the early development of vocational education? Arguing the question is not likely to be productive. Recognizing that sex bias and sex-role stereotyping is a contemporary concern in vocational education is important. Doing something about the concern by helping to eliminate the problem is productive.

Changing patterns in our society have created new profiles of the working woman. In 1920, she was a twenty-eight-year-old single factory worker or clerk. Today, she is a thirty-nine-year-old married person who may be found in any of a great number of occupations (Rubak 1971). The 31 million women who are in the labor force today are a cross section of all American women. They range in age from sixteen to over seventy, and come from all segments of American society. They live on farms, in suburbs, and in central cities. During the last fifty years, the ranks of women workers have risen from only one out of five to over two out of five of all American workers (ibid.).

Changes in industry have contributed to changes in the labor force participation of women and the demands placed on women in the home. Kievit (1976) comments on how, at earlier stages of economic development, women were able to combined their function of bearing and nourishing children with their roles as economically contributing workers, since both activities took place on a farm or within a family-owned business. The separation of economic production from the home reduced the potential of combining parenting and economic production for both women and men. One accommodation to these difficulties was the increasing delegation of most parental responsibilities to women.

Marriage has become of lesser influence in determining whether a woman will be employed. In fact, 58 percent of all working women are married and living with their husbands, and about one-half of the children in this country have working mothers (Vetter et al. 1977). According to Kievit (1976), 62 percent of all divorced or separated women are employed. And Duxbury (1975) points out that in 1972, 45 percent of all women sixteen years of age and older were in the labor force. Regardless of marital status, the odds of a woman's working are over 90 percent (Hackett 1972).

Change in family size is likely to influence participation of women in the labor force. Hackett (ibid.) hypothesizes that, in all probability, a decrease in average family size will generally enhance the employability of married women. Fewer mouths to feed and a lightened homemaking workload means women will be freer to engage in outside interests, continue in education, and seek gainful employment. Smaller families will also mean fewer years devoted to child rearing and a longer career life expectancy. Women who interrupt their careers to raise families will be able to reenter the labor force at an earlier age and, because of less time away from employment, will have greater confidence in their job skills.

Career life for a typical married women has been characterized by a "tri-level" pattern. After completing schooling, she works for a few years, drops out of the labor force when she has her first child, then returns to paid employment when her youngest child is in school. The ages she is most

likely to be employed are from twenty to twenty-four and from forty-five to fifty-four (ibid.). Recent trends point to women with children returning to work before the youngest child is in school and frequently between the birth of children. As Waldman et al. (1979) show, the break in time out of the labor market is growing shorter.

Economics is the compelling reason for employment for most women. Millions of single women and women who are heads of families must work to support themselves and their dependents. Married women also must seek work because their husbands' paychecks do not take care of basic family needs. Where families face poverty and deprivation, women's earnings often make a significant difference in the health and well-being of children. At all income levels, working wives earn one-fourth or more of the family income (ibid.). Vetter et al. (1977) also acknowledges economics as a strong coercion for women to work:

> The majority aren't working for extra pocket money, although many are trained only for jobs that pay pocket-money wages. Women work out of financial necessity. Their earnings very often mean the difference between low and middle incomes for their families (p. 2).

By the end of the century, according to Phillips (1976), women will make up at least one-half of the work force. (That point has nearly been reached today.) Participation in the labor force is a matter of need, although many women workers are concentrated in low-paying jobs in the secondary labor market, or in food service, or as domestics. This is in contrast to women's educational achievement. More and more women are achieving higher educational levels, which in turn increase their aspirations. At both ends of the economic spectrum, women are seeking greater opportunities than the traditional and stereotyped ones heretofore available to them. Greater income is dependent on greater opportunities for positions in trade, industrial, and professional areas.

Work is an important means for growth and development in life. As noted elsewhere, work roles become society's indicator of who a person is. For some women, there is a powerful deterrent against optimal personal development and recognition when an active occupational role is denied to them. The stereotype for women has been expressed in the wife-mother concept. However, the nurturing, child-rearing, mothering role can be provided effectively by substitutes—male or female; therefore, women's development and potential should not be limited to childbearing (Loftis and Ray 1974). Work is as potentially important to females as it is to males.

Inequities in the workplace are an outcome of sex bias and sex-role stereotyping. Social customs are evident in a host of popular beliefs regarding what is women's work and what is men's work. However, there is considerable evidence to refute popular beliefs, and it is well to consider the process by which old beliefs persist. As Kievit (1976) points out:

> Stereotypes are powerful in serving as a screen to observations of reality. When stereotypes are confirmed by the behavior of a member of a group, in this case, women, the belief or stereotype is confirmed and strengthened. When the behavior of a member of a group is contrary to the belief, it is likely to be "screened out" (i.e., unnoticed), thus protecting the generalized belief from contradictory evidence (p. 73).

Vocational educators need to be activists in refuting popular beliefs regarding stereotyping. It is through this role that sex bias and sex-role stereotyping can be reduced.

Federal legislation has added strength to the equality movement in vocational education. The Vocational Education Amendments of 1976 (P.L. 94-482) require states to designate and fund at least one person to work full-time on problems related to eliminating sex bias and sex-role stereotyping in vocational education. There is early evidence that this requirement is having a significant impact across the nation. Linkages within and among states regarding activities, projects, and development of materials together with nationwide efforts in sponsoring conferences and training sessions have occurred as a result of the federal impetus. Evidence of success should continue to surface as the work of the equity coordinators touches additional persons in vocational education. The ultimate goal is to remove bias and inequality based on sex-role stereotyping from the domain of vocational education.

The leadership role of vocational educators is important in reducing sex bias and sex-role stereotyping. Projections for 1980 to 2000 show a continued, rapid rise in the demand for female labor. Although the expansion of job opportunities in the poorer-paying and less desirable female occupations will be more than adequate, the expansion of job opportunities in better paying female occupations is in doubt. Kievit (ibid.) suggests that there is a likelihood of growing dissatisfaction among moderately and well-educated women who are poorly paid and who work where there are limited achievement opportunities. These conditions in traditionally female occupations and subsequent increases in pressure from some will encourage a breaking away from nontraditional occupations. Vocational educators prepared to

accept and promote workers in nontraditional roles will expand the contributions of vocational education to society and the individual.

Vocational educators exerting their leadership must base behavior on valid assumptions. Kievit (ibid.) proposes five such assumptions to guide practice in keeping pace with societal norms. Kievit's assumptions are as follows:

1. Employment will be a major ongoing life activity through which women will contribute and from which they will derive significant life satisfactions.

2. Selection and preparation for employment is a serious undertaking, which should take into account the likelihood that some time will be spent away from employment for bearing children and nurturing them through infancy.

3. Selection and preparation should be based on aptitudes, interests, employment opportunities, and economic returns consistent with the desired standard of living.

4. Women have a responsibility for providing for their economic needs, both directly and indirectly, with equitable ratios of paid employment and unpaid services in reciprocal relations with other adults.

5. Equal opportunity to compete for education, for employment, and for advancement is basic to fulfilling these responsibilities, for herself and family (pp. 78-79).

Dual roles may be the rule of the future rather than the exception of the past. The rule will itself have a dual application—to women and to men. People have been frustrated and confused because the clear-cut definitions of men's and women's responsibilities of the past are incompatible with the realities of contemporary living. The assumption that the world of work is a man's world, while home is a woman's domain is losing credibility. This notion is disclaimed by angry feminists, and it is inconsistent with what is happening in nearly half of the nation's homes.

Home management is a part-time job for a substantial portion of adult Americans, male and female. Increasing numbers of women are entering the labor force, and husbands with wives are functioning in the dual role of homemaker and wage earner.

PRINCIPLES AND A PHILOSOPHY FOR VOCATIONAL EDUCATION

The preparation of young men for the dual role of homemaker and wage earner is frequently surrounded by attitudes of traditional resistance and feelings of subconscious guilt. Some see this move as a "feminist plot." Unfortunately there are still educators who only view the dual role as a double job for women. There are, however, valid reasons why schools should promote the employability of both sexes by helping men become competent homemakers. Job skills and homemaking skills are complementary. Just as all young people need salable job skills for their financial security, they need homemaking skills for personal independence. Some individuals will manage a home and job singlehandedly, either by choice or because of unforeseen circumstances. Furthermore, as women's rights are more fully realized, it is likely that homemaking responsibilities will be equitably shared by husband and wife when both must work to support the family. As the old saying puts it, "What is sauce for the goose is sauce for the gander."

The message from vocational education is "equality for all." Equality for all must be present to allow for all appropriate alternative decisions regarding career choice. The choice of a career is perhaps one of the most critical decisions that a person is required to make. Any factors that impede or hinder that decision, or limit access into any educational program necessary to develop and explore careers, must be viewed as intolerable in a democratic society. Educational opportunity is associated with occupational choice. Occupation is associated with income, progress, and less tangible but equally significant factors such as satisfaction, happiness, and self-actualization (Duxbury 1975). Equality for all is the standard by which vocational educators operate. It is the standard by which vocational educators can support the principle that sex bias and sex-role stereotyping are not to be promoted through vocational education. Equality for all embraces a new catechism:

> What are all children made of? Made of?
> What are all children made of?
>
> Sugar and snips and snails and spice,
> And puppy dogs' tails and everything nice.
>
> That's what all children are made of (Vetter et al. 1977, p. v).

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SPECIAL NEEDS

THE PRINCIPLE

Individuals with special needs are served through vocational education.

MORE THAN EQUAL

Special needs, as a descriptor of individuals, connotes differences. Regardless of what those differences are or why they exist, special needs are an acknowledgement of unique characteristics and diversity requiring other than "business as usual." And the diversity among individuals centers attention on elements of commonality that can lead to grouping. In fact, in vocational education there is a tendency to group or classify individuals with special needs by sets of criteria. In a sense, we go full circle on the issue.

Responding to special needs means altering, changing, or adding to the repertoire of vocational education. It also means going beyond the behaviors that are most typically exhibited by the vocational educator. Providing for individuals with special needs is addressed by changes that are designed to help equalize the opportunities of people with special needs to find self-fulfillment and capacitation. Equalizing these opportunities frequently means providing programs and services that are more than equal, when compared with programs and services provided for those not considered to have special needs.

Uniqueness of needs was recognized in the early development of vocational education. The Commission on National Aid to Vocational Education (1914) projected a special concern for persons leaving school at an early age. The figures cited by the Commission are a clear representation of the concern. Only half of the children who entered the elementary schools of the country in 1914 remained to the final elementary grade, and only one in ten reached the final year of high school. On the average, 10 percent of the children left school at thirteen years of age; 40 percent left by the time they were fourteen; 70 percent by the time they were fifteen; and 85 percent by the time they were sixteen years of age. On the average, the schools carried pupils as far as the fifth grade, but in some cities great numbers left below that grade.

Vocational education was intended to help change the schools inability to hold students. However, the Commission's judgment was that special emphasis was needed on education for early leavers who were already employed. According to the Commission, these young people were neither prepared to choose a vocation intelligently nor to follow it with sufficient

prospect of future advancement, because the schools had not assumed responsibility for their preparation for employment before they became wage earners and did not provide continued training through part-time schooling after they had gone to work.

The Commission expressed the importance of vocational training for every boy and girl. The Commission believed that it was most important to provide for the great mass of children whose education was terminated by entrance to a job, and whose only prospect for further education depended on the availability of education that was not divorced from the possibility of wage earning.

The Commission responded to these special needs by recommending part-time schools. The purpose of such schools was twofold:

1. To increase the general intelligence of young workers and lead them to understand better their social and civic duties.

2. To increase their industrial intelligence and skill and develop capacity for advancement within a given trade where such opportunity exists, or where it does not to prepare for some skilled and remunerative work in another line (ibid., p. 52).

SOLUTIONS

Special needs groups and the individuals who make up special needs groups are a special challenge for vocational education. Defining, identifying, accepting, adapting, creating, and giving are terms that indicate separate challenges. In some cases, good solutions to the challenges are yet to be found.

Definitions of special needs groups lack precision. Further, identifying who belongs to a specific group compounds the problem. As Phillips (1976) recognizes, there is no neat taxonomy of discrete categories wherein there exists no overlapping of individuals into more than one group. Persons do not and perhaps should not be easily pigeon-holed.

Federal legislation has provided direction for identifying target groups for special needs activities. Broadly stated, these include youth and adults who are disadvantaged, handicapped, underemployed, unemployed, members of minority groups, nonnative English language groups, and/or displaced homemakers.

Phillips' definitions are similar, although he lists special groups by two systems—classes and specific deficiencies. The former category includes

youths, blacks, women, offenders, welfare recipients, Vietnam veterans, migrant seasonal farm workers, old workers, Indians, and scientists and engineers. The second group—persons with special deficiencies—includes those with educational deficiencies, no skills, poor work habits, poor job histories, personal and social problems, motivation, and cultural factors (ibid., pp. 26-39).

Each group classification conveys varied meaning. The largest variable in the meaning, however, is the understanding and attitude held by individuals—those in the group and those outside of the group.

Understanding that each group is composed of individuals is an early step to developing solutions. The view that is held of self as a member of a given special group, together with the view of that person held by those outside of the group, largely determine how such persons will relate and interact. Putting the issue in a learner-educator relationship, the learner's view of self as a member of a special group, together with the vocational educator's view of that person, largely determine how the two will relate and interact in the learning environment.

Acceptance of special group individuals as individuals is the "needle's eye" that each vocational educator must pass through. Shill (1976) stresses that persons in special groups are, in many cases, difficult to teach, and personnel working with them must exhibit positive attitudes in order to produce desired results. An emphasis on sound understandings and constructive attitudes in working with persons in special groups is critical in all vocational personnel preparation programs. This is also true for other administrators, teachers, counselors, and ancillary personnel charged with a responsibility to provide educational programs for individuals who are members of special groups.

Values held by individuals with special needs are not always congruent with those of vocational educators. More importantly, they need not be congruent. The cultural values of one group do not need to be bent to fit the values of the dominant culture. Recognition and acceptance of the differences is usually what is needed. Marjorie Bear Don't Walk (1976) presents the position of the Native Americans:

> There developed a joke among Indians that if you sent any Indian to the moon, he/she would find a way to return to the reservation. Most of us do return to our reservations; most of us would prefer to be trained on or near our own homes. Most of us would like to find jobs on our own reservations (p. 132).

Vocational educators who accept this expression of desire will find an initial basis for providing vocational education different from that of the past. But the educational needs of Native Americans do not end merely with reservation-based and reservation-oriented programs. Other important aspects must be addressed, as well. It must be determined whether training for a new social and economic role will cause a communication gap between Indian students and their parents and family. It is also important to determine how emotional support can be provided to help students and family members adapt to the new situations (ibid., pp. 132-133).

Mexican-Americans also have cultural concerns that confront the vocational educator. As Valdez (1976) asserts:

> Acceptance, not understanding, of the culture of the Mexican-American is of paramount importance for those who aim to educate him [sic]. Once his culture has been accepted, the student will respond to instruction. As his self-confidence develops, the instructor can proceed patiently to educate him. But if Mexican-American youths are *presumed* to have similar stereotyped values as the adult Mexican-American population, it is possible that educators and employers may regard them differently from their Anglo counterparts (p. 158).

The family structure plays an important and dominant role in Mexican-American culture. Family solidarity, until recently, held top priority in the life of this group. The father was the head of the family and the mother supported him in decisions affecting the family. The father was the breadwinner, the financier, and the spiritual director of his family. His most immediate need was for a job that paid enough to support himself and his family. Today, this type of family structure is scorned, even ridiculed by many, and it should not be surprising, then, to find (especially among urban Mexican-Americans) that the rate of divorce continues to rise, with family solidarity no longer a top priority.

Mexican-Americans are from childhood taught to respect others. Respect for elders is held to be indisputable. Caring for and sharing with kin and friends has catalyzed a stereotype that purports that Mexican-Americans are not oriented to competition. In truth, the "dog-eat-dog" society of which Mexican-Americans are members generally causes these persons to be the victims rather than the villains.

These two groups, Native Americans and Mexican-Americans, illustrate the problems faced by diverse groups of minorities. Each has its own cultural heritage and values that do not necessarily coincide with those of

vocational educators. Labels such as rural, Asian, urban, black, Latin, aged, handicapped, or other of a myriad of possibilities could be assigned. However, labels are not as important for vocational educators as acknowledging that differences exist and demonstrating a willingness to be accepting of persons as individuals. As Phillips (1976) emphasizes, individuals—and all special groups can be reduced, in the final analysis, to individuals--have to be served through programs. Whatever materials and methods are appropriate to programs, whatever techniques and methodologies are used, these individuals should not be seen either as isolated psyches without an environment or as behavioral blanks that are a simple function of environment. They must be seen as psychosocial beings.

Of the special populations, disadvantaged and handicapped have received the greatest attention in vocational education. Here, the primary focus has been on selected minority groups. The emphasis has been on illustrating the similarity of the need, regardless of the reason for recognition as a special group person. The human potential of handicapped persons, disadvantaged individuals, and persons classified as having special needs for any other reason ought to be the overriding issue. The problems of discrimination in unions, the lack of opportunity in the workplace, the urgency of family needs growing out of unemployment and underemployment, are all human problems that are uniquely related to the roles that vocational education should perform.

Adapting and creating follow acceptance of the individual. Differences probably mean old ways must adapt to new situations. In some cases, new creations will be required. Adapting and creating may involve programs, curricula, methods, schedules, locations, requirements, organizational patterns, or other possibilities.

The end result sought in adapting and creating is equality of opportunity. Equality of opportunity provides each individual with the chance to seek preparation as a productive member in a pluralistic society. Hobbs (1976) suggests that a society that seeks maximum benefits from the provisions it makes for education must ensure that equal and adequate educational opportunities exist for every member of the society. Efforts must be made by educational and lay leaders to assure a high degree of agreement between what we say we believe about education and what we actually do to provide adequate educational opportunities for all.

Vocational educators who serve special groups are "special persons." Vocational educators who accept, adapt, and create in response to the uniqueness of the individual with special needs may otherwise be very much like other vocational educators. Shill (1976) believes that may of the personal characteristics needed by personnel working with special groups are the same as

those needed by persons working with regular groups. The difference apparently is not in the *kind* of personal characteristics, but *the degree to which the characteristics are possessed and utilized.* Shill goes on to classify these important characteristics as: understanding the students, respect for students, extra patience, flexibility and resourcefulness, emotional stability, and motivation (1976, pp. 314-315). Becoming a "special person" as a vocational educator is dependent on the degree to which the individual is willing to exercise positive behavior toward other individuals.

The individual vocational educator, then, is pivotal in determining how well persons with special needs are served through vocational education. Ultimately, there is a parallel between success and the willingness and ability of the vocational educator to give of self. Affirmative action is a key word in summarizing how the needs of special group individuals are met. In this case, affirmative action is not legalistic behavior, but is rather an intrinsic value that sets direction for behavior so that others might "become." Affirmative action leads vocational education to serve individuals with special needs.

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STUDENT ORGANIZATIONS

THE PRINCIPLE

Student organizations are an integral feature of vocational education.

FUTURE FARMERS OF AMERICA

The Future Farmers of America (FFA) is the oldest of the vocational student organizations. Officially organized in 1928, the FFA grew out of several different state and local organizations or clubs related to vocational agriculture. In some cases these groups began shortly after passage of the Smith-Hughes Act. However, it was not until the latter part of the 1920s that these organizations began to emerge as a factor in the instructional program of agricultural education, and ultimately became an integral aspect of the curriculum.

FFA influenced the development of other vocational student organizations. The organizational patterns of these groups and their operation show evidence of building on the strengths and experiences of FFA as a student organization related to a vocational program. However, each organization is unique in terms of the students and programs served.

EXPANDING OPPORTUNITIES

Each major area of vocational education is represented by a student organization. The areas and related organizations are: agriculture education, Future Farmers of America (FFA); business and office, Office Education Association (OEA) and Future Business Leaders of American (FBLA); distributive education, Distributive Education Clubs of America (DECA); home economics, Future Homemakers of America (FHA), which also includes Home Economics Related Occupations (FHA/HERO); health occupations, Health Occupations Student Association (HOSA); industrial arts, Industrial Arts Students Association (IASA); and industrial education, Vocational Industrial Clubs of America (VICA). Several of these have postsecondary affiliates or chapter provisions in addition to those listed.

Leadership development is foremost among the goals of vocational student organizations. Each vocational student organization lists, among its purposes, provision for students to discover and engage in leadership experiences. Activities that are designed to assist student members in developing their full leadership potential are built into every vocational student organization. Development of competent, aggressive leadership has been

identified as a common aim of vocational student organizations (Bales 1979).

A commonality of leadership skills exists among vocational student organizations. Although some may argue the nature of leadership skills, Bales (1979) identified ninety-eight leadership skills that potentially are developed through participation in vocational student organizations. Eight-five of these skills are common to all of the vocational student organizations included in Bales' study.

Learning by doing is as applicable to leadership development in vocational student organizations as it is to vocational education. According to McMillan (1972), "Vocational youth organizations are laboratories in which students learn how to be leaders . . ." (p. 208). Leadership development comes alive as students work together within an organizational structure, accomplishing group goals and experiencing the rewards of democratic ways.

Leadership development in vocational student organization is considered more than holding a high position. McMillan (ibid.) emphasizes that young people must learn early in life that it takes leadership up and down the whole line to make society function, and that leadership is a manner of going about accomplishing something rather than a spot of glory in the sun. Vocational student organizations provide this opportunity. Each student may find one or more opportunities to practice and develop personal leadership ability through a vocational student organization. In a very real sense, the student organizations serve as part of the induction process into our democratic society.

People development—helping individuals "become"—is a justification for vocational student organizations. Helping individuals become occurs through both belonging and in being somebody. Reel (1979) sees vocational student organizations as filling the former role. In this regard, she states, "Not to be overlooked is the important role organizations play in fulfilling the human need to belong, particularly during the difficult adolescent years" (p. 215). McMillan, in addressing the later role, indicates that every young person, no matter what the person's native talents, no matter the kind of home life, and no matter the person's hang-ups, wants to be somebody: "A chance to be somebody—that is the essence of vocational youth organizations" (McMillan 1972, p. 207).

A chance to be somebody also means being an individual. Options for developing as an individual are provided through vocational student organizations. The individual who wants to concentrate on specific areas of personal development or to specialize in some job-related competency generally finds that such options exist. Vocational student organizations provide a

structure for individualizing instruction in response to the student's interests and needs.

Motivation toward learning is another outcome of vocational student organizations. In part, this is an extension of building on student interests and needs. It is also an inherent feature of the competition that is a part of many vocational student organization activities. Regardless of whether it is competition with others for recognition or competition with self (as in FHA) to achieve a personal goal through an "encounter," motivation toward excellence is inherent in vocational student organizations. The well-directed student organization offers powerful avenues for motivating students and also recognizes and helps them feel accepted and liked (Newcomb 1979). Being somebody, an individual, and being motivated are not disassociated events in the life of a learner.

Competition is related to leadership and to existence itself. The real world is a competitive place. Excellence is rare, but it is achievable and it has its rewards. Excellence, a vital element in society, thrives on competition. Dickerson (1978), in referring to the FFA, declares, "The desire to excel gives students inspiration and motivation to learn new ways of doing things" (p. 220). Competition and excellence are complementary as process and outcome in vocational student organizations.

One additional feature of competition relates to viewing learning as a lifelong process filled with potential for enjoyment. Being involved in activities and events that are closely tied to personal interests and needs removes external compulsion. Under these conditions, learning becomes the opportunity to fulfill the desire to grow and be. As McMillan (1972) points out, "Competition is a natural instinct and it has a close relationship to fun" (p. 211). Or as Reel (1979) observes, it is through participation in student organization activities that youths learn to work and get along with all kinds of people outside their peer group. Reel considers this as an essential skill for students to take with them to the world of work. They find out that learning can be fun and that it can go on throughout their lives.

Vocational student organizations are the display windows through which many people see vocational education. Students representing vocational education are most often seen by the public while participating in the activities of vocational student organizations. Students, as members of these organizations, are publicized for their accomplishments and achievements, for their contributions to the local community, for the roles they perform in public service, and for their involvement with the work world and its leaders. It is not surprising that community views of vocational education find substance in events representing the vocational student organization. Reel (ibid.) observes that student organizations are an important public vehicle

for helping vocational students learn how to function within an organizational structure. Invitations for community participation flow into the school through student groups. Parents also find it easy to participate in their children's education through this informal setup.

Student leaders at all levels carry the benefits of vocational education to state legislators and Congress, the White House, to business and industry, and to many other organizations and agencies. State and national staffs of the vocational student organizations provide visibility for vocational education through publications, programs, and public information campaigns. Some of the student organizations have international exchange programs which help spread the word about vocational education to the corners of the world. No other instructional element provides vocational education with such benefits.

The benefits of vocational student organizations are realized, to a large degree, because these organizations are an integral part of the instructional program. The fifth section of the American Vocational Association (AVA) 1980 yearbook, *Vocational Instruction*, is titled "Student Organizations: An Integral Part of Instruction," and clearly illustrates the point. McMillan (1972), in support of this proposition, declares, "Vocational youth organizations and leadership should be an integral part of vocational eduction" (p. 212). Actually, they are!

Instruction in vocational education is a teacher-directed activity. As such, it takes teachers who know how to use student organizations as a method for teaching and who also have the skills and knowledge to integrate vocational student organization activities into the curriculum. Teaching through an organization that has youth officers and members and has projects directly relating to subject matter is energizing for all involved: the teachers, students, school, and community.

Vocational student organizations were not originally a part of the instructional program. Dickerson (1979) reminds us that the FFA was conceived originally as an extracurricular or supplementary form of instruction, but good teachers made it an actual part of the agriculture curriculum. It was through their vision and effort that the FFA became an integral part of instructional programs, making those programs richer, more practical, more meaningful, and more challenging to thousands of vocational agriculture students. Frick (1979) acknowledges that although the FHA was envisioned as an integral part of home economics, that vision has not been totally fulfilled. Frick goes onto suggest that by integrating FHA activities into the classroom, skillful teachers can strengthen the total home economics curriculum. DECA is labeled by Hephner (1979) as a vital component of instruction. Hephner also lists the following principle: "DECA is an integral part of the distributive education program" (p. 232).

PRINCIPLES AND PEOPLE

Vocational student organizations are a critical part of vocational education; some say they are the heart and soul of vocational education. Clearly, they are one of vocational education's most effective resources for dealing with the challenges facing the profession—the development of people. Student organizations put action into vocational education. Without any doubt, student organizations are an integral feature of vocational education.

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TEACHERS

THE PRINCIPLE

Teachers of vocational education are both professionally and occupationally competent.

OLD OCCUPATIONAL DEMANDS

Teachers are the most important and critical element in vocational education. The values, skills, professional knowledge, experience, and human relations factors that a teacher possesses largely determine the quality of learning opportunities that occur in the name of vocational education.

The importance of the teacher of vocational education was signified in diverse statements early in the development of vocational education. Snedden (1910c), in his concluding statement on vocational education, alluded to the vocational teacher's role. In his opinion, the pedagogy of vocational education should differ widely from that evolved for liberal education, especially with respect to making participation in productive work a fundamental element.

Frequently, the early emphasis on teacher qualification was on the need for occupational experience. Even so, the function of instruction and teaching was not overlooked or minimized. Allen (1912), in addressing the sixth annual meeting of NSPIE, seemed to emphasize the teaching function when he suggested four assets for teachers. These were: (1) the teacher must be competent in the specialty that is to be taught; (2) the teacher must know how to teach; (3) the teacher must deal with a group of problems that involve knowing children and be able to deal sympathetically and intelligently with adolescents and adults; and (4) the teacher must have a broad viewpoint of the position (p. 80). NSPIE went on to publish a bulletin (National Society for the Promotion of Industrial Education 1917) on the selection and training of vocational teachers. In an early statement, the bulletin addressed the qualifications of industrial school teachers and urged that readers keep in mind that the controlling purpose of the industrial school was to prepare its pupils for profitable employment as producers in industry. The bulletin stressed as a fundamental point, that teachers who serve in such schools should possess industrial experience or training adequate to their particular tasks. The industrial school, however, was not seen merely as a device for teaching a trade; it was also a school dealing with the education of adolescent children. As such, it had responsibilities similar to those of any secondary school. Like other public schools, it should require

its teachers to meet certain qualifications of personality, education, and teaching ability.

The Commission on National Aid to Vocational Education (1914) also addressed the qualifications for teachers of vocational education. The Commission's view was that teacher preparation should be a requisite for receiving federal grants for vocational education. The Commission emphasized its position by stressing the importance of training teachers. The Commission believed that, after an early date, no monies should be appropriated to a state for the salaries of teachers, supervisors, or directors of agriculture education, unless the state had taken advantage of the grants for the training of teachers, supervisors, and directors of agricultural subjects. Furthermore, a state should not be given the grants for salaries of teachers of trade and industrial subjects unless it had taken advantage of the fund for the training of teachers in those subjects.

Special requirements for the training of teachers were recommended by the Commission. Those special requirements were to be met if states were to qualify for federal grants for vocational education. The Commission's view was that the most important minimum requirement in the training of vocational teachers was that they should have practical experience in, or contact with, the calling for which they give instruction. The Commission believed that the success of the movement for vocational education depended upon securing teachers of adequate experience in agricultural, trade, and industrial pursuits. Such instructors must be able to combine knowledge of the subject and of the proper way to present it, together with such practical knowledge of the vocation of which they are teaching as to be able to relate the training to the purpose of this education; namely, to prepare students for useful or profitable employment.

According to the Commission (ibid.), the development of vocational education, particularly in trades and industries, requires many kinds of teachers to deliver education in the many kinds of trades and industries to be taught. Teachers for these subjects could not be prepared in a uniform manner. The amount and character of experience and preparation would have to vary as much as the trades and industries themselves. It was important that somebody determine the kinds of preparation needed and supervise the training; consequently, it was believed that each state board should be free to allot the funds for the preparation of teachers to such institutions or classes as it saw fit. The discretion was also lodged with the state board, with the approval of the federal board, to determine the amount of experience and contact necessary for the different kinds of vocational teachers. States were designated by the Smith-Hughes Act as having final responsibility, subject to federal board approval, of determining the minimum qualifications for teachers of agriculture, trades, industry, and home economics.

The minimums were, however, to include occupational experience and professional preparation.

NEW PROFESSIONAL EXPECTATIONS

The teacher remains a critical feature of the vocational education endeavor. Teachers are the fulcrum for creating learner options. Loftis (1979) acknowledges that teachers are the single most important factor in the total educational enterprise. Teachers are the basic unit of the school organization, and they are capable of creative choices and actions if conditions that thwart these kinds of behaviors are removed and supporting conditions are developed. Even when conditions are not free of constraints, teachers should have the opportunity to create and provide learners with the best options available. In the final analysis, the critical role of the teacher does not change under the best or worst of situations; only the enactment of the role changes.

Teachers of vocational education are members of the education profession. The fact that vocational teachers may have occupational backgrounds is not a basis for altering a professional relationship with education or viewing teachers as other than professionals.

Foremost among the responsibilities placed on vocational teachers is that of indeed being teachers. Newcomb (1979) reasons that vocational teachers must possess pedagogical competence (i.e., competence in the art and science of teaching). Teachers who are highly knowledgeable and skilled in their technical areas, but who do not possess a high level of pedagogical competence, are fulfilling only part of the requisites for being good teachers. Teachers must be both technically and pedagogically competent. The view that Newcomb holds is descriptive of the teacher as a humanist.

In keeping with the humanistic teacher view, Newcomb (ibid.) suggests that the teacher all of us want to be has a personality to which others react positively. Such teachers are people-centered, not knowledge-centered. They are teachers of students, not teachers of subject matter. They have enough energy to go around, enough for all the students to have a part of them.

As Newcomb puts it:

> Humanistic teachers are more than purveyors of facts. They know that technology is expanding too quickly for anyone to teach or try to learn all the facts. Therefore, they work to help people learn how to solve problems rather than remember the solutions of others. They are guides, philosophers, and friends to students (1979, p. 17).

This description of the humanistic vocational teacher emphasizes the professional nature of the vocational education undertaking.

At times, vocational education has negated its position as a profession. Shortages of qualified teachers, for example, have stimulated a relaxing or waiving of certification requirements. As Evans (1971a) points out, the most common first step in meeting a teacher shortage is to waive requirements for preservice teacher education. If this is not sufficient, the requirements of a certain number of years of successful employment experience is then reduced. The emphasis on maintaining occupational standards in preference to professional qualifications has detracted from the professional image of vocational educators.

Occupational and professional competence are both important in vocational education. Allen (1974) reiterates this position as a principle with supporting comments:

> Instruction should be given by teachers who have had occupational experience in the subject(s) that they are teaching. Teachers must be equipped with both practical experience and professional training to provide students with the skills, knowledge, attitudes, and appreciations they will need to fulfill their occupational goals (p. 122).

Allen goes on to emphasize that the need for occupational experience for teachers of vocational education cannot be overemphasized. It is a prime distinction between vocational education and many other areas of education in which actual experience with the instructional content is not essential. Vocational education instructors must, through personal, successful, and advanced occupational experience, begin to generalize and incorporate essential principles of an occupation's job demands into their teaching. The teachers' inability to bring the basic assumptions of an occupation into the instructional setting precludes that students will attain an overall assimilation of the necessary occupational skills and appreciations. To be able to meet the performance standards outlined by Allen (ibid.), vocational teachers need to remain current with developments in the occupational areas being taught.

Maintaining occupational competency places a dual responsibility on vocational educators. Inservice activities must provide for both professional and occupational upgrading. An ongoing demonstration of competence in both aspects of teaching in vocational education result in quality programs for learners and enhance the public's view—other educators included—of vocational education.

Koontz (1971) expresses her viewpoints on these matters. Teachers of vocational education carry tremendous responsibilities. One is to upgrade the field—to win for vocational education the respect and status it deserves. Vocational education is vital in today's society; teachers must recognize this and communicate it to students.

Teachers of vocational education also have the responsibility for developing new ways to accomplish their work. They must be in close touch with the employment needs of the community and those of the nation at large. Through continued practical experience, they must keep personal skills from getting rusty and knowledge of the occupational area from becoming outdated. As Allen (1974) puts it, lifelong learning is as applicable to vocational education teachers as it is to other segments of our population. Completing a prescribed teacher education program may be adequate for the initial years of teaching, but the process of continuous refinement in teaching skills and subject content expertise is endless. Upgrading and change become nearly synonymous for vocational educators.

Change takes on another important dimension for vocational educators. Essex (1971) calls attention to the growing awareness of the compelling need to redesign American education. He suggests that the vehicle to lead such a revolution in American education could well be the acceptance of vocational preparation as an integral part of the total school program. If this outcome is to take place, vocational teachers must be at the forefront of the change process.

Teachers can be effective in contributing to the change process on an individual basis. Loftin (1979) emphasizes that teachers can contribute to the change process within in their own classrooms. The classroom is a place where experimentation with different strategies and new personal behaviors may be tried. Within this environment, teachers can become agents for change with students as the benefactors. Teachers can either influence change without official sanction or be selected by administrators or colleagues to assume the role of the change agent. Both professional settings and the community provide opportunities for varying degrees of influence. A teacher may function in relation to a small group or committee or, indeed, may be responsible for serving an entire organization. In effect, the vocational educator who is prepared and respected as a person of professional capability can act as a role model for the changing of the guard in education.

Changing the guard may begin by practicing what we preach. This comment has particular relevance to vocational teacher educators. An example provided by Shill (1976) illustrates the point. In the past, many teacher education programs stressed the fact that no two human beings are alike; therefore, people do not learn at the same rate or do not solve problems in the

same way. At the same time that individualized differences were being stressed, teacher education programs did not reflect awareness of the very points being stressed. Some programs did stress the concept of individualized instruction, but without providing any demonstration of its effectiveness. Shill sums up his concern about personnel preparation by asserting, "Above all, personnel preparation program effectiveness and impact must be measurable and measured, its impact assessed, and results returned for program refinement and revision" (ibid., p. 326). Teacher educators are not immune to the need for change; they have the responsibility of acting as desirable role models and of beginning the change "at home."

Balancing occupational competency against professional expertise presents a challenge for vocational education. While seeking the appropriate balance—and there is no real evidence that we know what that is—it is appropriate to rethink the relative weight given to each of the two major factors, occupational competence and professional expertise. Even when a sort of balance is achieved, changes in technology and society are likely to introduce new disparities.

New alternatives in teacher preparation may be the most viable ways to cope with changing demands. Continued reliance on converting producers from business and industry into vocational teachers may be inadequate to meet new and emerging demands. Feldman (1971) addresses the importance of this topic and the kind of teachers needed. According to Feldman, it should be clear that in achieving our purposes the highest priority should be given to the training and developing of a new breed of educators who are vocationally competent and academically accomplished. There is no doubt that the work experience vocational teachers bring to their jobs is indispensable to performance in the classroom. Work experience helps teachers understand the workers' milieu and refines skills needed in the occupational area. Nevertheless, it seems likely that the mission of education rather than trade instruction would be better accomplished with a different mixture of college and work experience (ibid., pp. 344-345).

Venn and Skutack (1979) mention that we cannot expect simply to improve the content, process, and evaluation of instruction; we need to try some new approaches with different settings and people for preparing teachers in order to improve the quality of instruction. New approaches and different settings and people to implement instructional programs predict change in the preparation of vocational educators. Furthermore, the new breed for which Feldman (1971) calls will not emerge from old settings without conspicuous and decisive changes in teacher education procedures and certification expectations.

Evans (1971b) addresses some of the unresolved issues in vocational teacher certification. He indicates that most states require work experience

as a condition of certification for vocational teachers, although the requirement does not ensure that the teacher has the necessary technical competencies in the field to be taught. There is general agreement that twelve years of employment experience may have taught some people very little (both because some employment is routine, repetitious, or highly specialized, and because some people learn much more slowly than others). Although it is practiced, states seldom admit that, during periods of teacher shortages, teaching certificates are provided for individuals who would not be considered for certification at other times. Unfortunately, in vocational and technical education, certification, once obtained, is difficult to revoke. These issues all suggest a need to rethink how vocational education obtains qualified personnel.

Rethinking vocational teacher selection and development must consider the dilemma of the past. The dilemma has been that, in vocational education, we have two different routes for obtaining teachers. The one route emphasizes occupational experience, whereas the other gives priority to professional and academic affairs. The need is to meld the two routes into a flexible, but comprehensive approach that will result in teachers qualified to hold the title "Teacher of Vocational Education." The title is a proud distinction and justifies the efforts of vocational educators to ensure that individuals who carry this title have demonstrated the capacity to perform within the high range of professional creditability.

The need for vocational teachers with high professional creditability is a national concern. Recent federal legislation, both in 1968 and again in 1976, has emphasized the need for meeting teacher needs in vocational education. The priority attention accorded through federal legislation has not solved either the teacher shortage nor ensured quality performance in the classroom. Neither has the "slight" movement toward competency-based teacher education guaranteed that vocational education will secure more teachers with high professional creditability. Inservice education, too, has fallen short of the mark in attempting to lift the overall image of vocational personnel. The struggle must go on.

Alternatives and new designs in the preparation of vocational teachers have been proposed. Evans (1971a) presents a dozen prototype programs for pre- and inservice education; Cotrell (1971) sees performance-based teacher education as a way of vitalizing teacher education; and Essex (1971) proposes an executive teacher model. There are also a number of community college-to-university transfer programs that encourage vocational program students with high potential and demonstrated interest in teaching to continue toward a baccalaureate degree and full teacher certification. These latter programs usually build in a cooperative experience that not only meets certification requirements but also provides a broad range of occupational

experiences. These experiences overcome the routine, repetitious, or highly specialized experiences referred to earlier by Evans.

The future for teachers preparation is not well charted. However, the fact that it will change is clear. It is equally clear that vocational education will continue to demand teachers who are both professionally and occupationally competent.

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WORK ETHIC

THE PRINCIPLE

A positive work ethic is promoted through vocational education.

BEING TRADITIONAL

Development of a work ethic has often been taken for granted by vocational educators. It is not difficult to understand why this might be the case, especially when thinking of work as a productive act. After all, vocational education is ensconced by an ideology of work—one of the ultimate goals of vocational education being that of preparing individuals for productive roles, remunerative and nonremunerative.

Work has been a part of the American scene since its founding. The ideals of the Protestant Reformation and Calvinism, which proposed that work is good and leads to salvation, were a part of the doctrine of many of the first settlers. Later emigrants also held similar values regarding work. America was, in fact, viewed as a land of opportunity, where a person could, through hard work, achieve financial success and independence.

Work is viewed by some as a synonym for being. Therein, an individual defines self or is defined by other persons in terms of the work performed. In effect, the individual becomes an extension of the work, and the work of the individual seems to take on greater importance than the individual. Consistent with this view is the notion that work gives dignity to the person. Others, however, argue that the reverse is true—the person gives dignity to work.

Arguing these contrasting notions is not vital to establishing the importance of work as a traditional ideal in America. From this ideal, work is a standard for success. Work is a mark of vitality and purposefulness. Work is a measure of the individual's contribution to society. Finally, work is the predominant influence on the individual's life in terms of the hours awake, friends and associates selected, living standards, and the place where life is to be lived.

ETHICS AND CHANGE

The work ethic in America is—as other aspects in our society—subject to change. Change in the work ethic can be viewed, however, from a proactive stance; that is, there are those who encourage speculation and thinking regarding new values. Green (1968) is a prominent representative of this group. Green directs attention to understanding the nature of work, labor,

job, and leisure, and the various relationships that can exist between and among these in our society. Green also theorizes about how these important ideas may be addressed by the schools.

A "reactive" view declares that the work ethic is dead. However, that declaration is not accepted by the vocational education community. Levitan and Johnson (1975) express a view more representative of vocational education. They declare that futurists and the public media have pronounced the work ethic missing and presumed dead. A new generation, seeking a life of ease, refuses to labor in the factories. Moreover, according to some futurists, work is on the way out. Not only will there soon be no workers, there will be no need for workers in an automated society. Computers and nuclear energy will eventually be able to satisfy almost all human needs, chaining humanity to an everlasting easy chair.

Despite persistent debunking, these myths endure and become the predominant prophecies concerning the future of work. A less emotional look at trends in work suggests that the future may be less catastrophic (or utopian). Today, instead of a labor force of more than 88 million, only 20 million workers are actually required to produce goods and services sufficient to maintain a 1900 standard of living. But, obviously, society has made the opposite decision. As Levitan and Johnson state, "The work ethic may have died in spirit, but its body still seems to be gainfully employed" (ibid., p. 49).

That the work ethic is undergoing change cannot be denied. Few scholars agree on why the change is occurring. Lee (1976) provides one alternative. Work has been viewed as an integral and necessary part of human life. It meets certain intrinsic and extrinsic needs of human beings. The traditional work ethic has undergone change, and much of this change can be attributed to the attitudes of youths toward work. The controversial report, *Work in America* (1972), dealt with changes in attitudes toward work, worker dissatisfaction, alternatives in the redesign of jobs, and the relationships of education and training to work entry and satisfaction. It presented a summary of the role of young people in effecting change in work, the conditions associated with it, and what they expected from work. The report suggested that youths will be increasingly influential in shaping the work setting and that work will become more intrinsic. As workers, youths desire to work under less authoritarian supervision and to have more opportunity for motivation to work to come from within (Lee 1976).

In thinking about the work ethic, Cross' (1975) comments are useful. She believes the work ethic may be defined as a system of values related to production of goods and services beneficial to humans. This definition implies that work may or may not have monetary remuneration. Emerging work values include voluntary work as well as housekeeping, both of which are

nonsalaried. Another changing value is reflected in the effort to avoid occupational sex stereotypes. The value accorded to dignity of work and self-satisfaction appears to remain intact. It is the task of vocational education to help preserve these work values. The work ethic and/or value system of individuals are related to people's ability to enjoy life fully and to their productivity as workers.

Productivity as a part of the work ethic is not questioned. "A full day's work for a day's pay," in spite of being trite, certainly conveys a sense of being productive. The ability to purchase most goods and services is largely a result of payment for labor. Individually, society's members have a powerful incentive to keep working, no matter what release from work they reap from productivity (Levitan and Johnson 1975). Franken (1975) indicates, however, that economic changes and the ever-growing inflation of our times have actually made work an economic necessity.

Productivity is also measured by other than dollars earned or products produced. Services as much as goods have become the focus of rising expectations; and services, to a large extent, imply more human contact than does machine manipulation. A machine may teach, but it is unlikely to inspire. It may diagnose a patient, but it can hardly reassure that person. Service, particularly quality service, is an important measure of productivity.

Work as productive effort is important in our society. Society's survival, according to Franken (1975), is dependent on work. And although work precedes survival, knowing whether a civilization had existed would be impossible without the artifacts produced as a result of productive effort. Work, then, is not important just as effort expended, but is important for what it contributes to an ongoing society.

Work is equally important to individuals in our society. As Levitan and Johnson (1975) point out, even though society does not depend on work for well-being, individuals require work for their own fulfillment. As iconoclastic as it may sound in this era of the "death" of the work ethic and the emergence of leisured subcultures, work—in the best sense—is not simply an escapable curse required of the living, but a fundamental effort that defines life. Work is the continuous drive to create, the sustained effort to triumph over nature, and the limitations of the present (ibid.). Milliken (1975) claims that the individual finds identity through work. What individuals seek in work, according to Franken's view, is in close agreement with what is required to fill the five basic needs identified by Maslow. The importance of work to the individual is pervasive and is a source of identity.

If identity accompanies the work done by a person, then it seems plausible that a false identity may be imposed upon a person who is not given the opportunity to prepare for the field of his or her choice. Milliken (1975)

claims that if a worker's job fails to provide a sense of identity, then the individual must seek self-esteem from other sources. Whatever serves as a source of self-esteem is also a source of satisfaction. For the worker, there are two dimensions to work: What it does *for* the individual, and what it does *to* the individual.

The quality of the work setting has grown in importance to American workers, and the quality of work and the workplace will become more important in the future. In our contemporary society, it is possible that money and leisure rewards may become less important social issues than the redistribution of creative and responsible work (Levitan and Johnson 1975). Milliken (1975) concurs, saying, "It is possible that the importance of job satisfaction will replace, or at least equal, the importance of salary for workers of the future" (p. 129).

Vocational education can be a mechanism for furthering decisions about work quality. Workers need to develop skills that will encourage and enable them to participate in decisions regarding work methods and work environments. Recent surveys of student attitudes make it clear that youths are reluctant to accept the authoritarian structure evident in much of our business world. The educational system can, by making its own structure more participatory, channel this rebelliousness toward constructive ends (Herrick, Bartholomew, and Brant 1975).

Work ethics and work quality are not fabrications that will quickly fade. Both are a part of the value system in contemporary society. Vocational education teachers must deal with the question of how best to prepare learners for the real world of work. We must decide whether occupational programs should just prepare workers who will adapt to whatever conditions the employers provide, or whether instruction should include how to use one's rights appropriately—as a worker, as a citizen in a democracy, and as a human being whose needs and feelings inevitably will exert a powerful influence on organizational behavior (Milliken 1975). The importance of work to the individual and society demands that these and similar issues be addressed.

Work ethic and work quality are both in the arena of values—an arena for conflict. However, vocational education's posture of promoting a positive work ethic can ultimately affect the workplace as well as the worker and can help provide a resolution to conflicting values.

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CHAPTER 4
PRINCIPLES AND PROGRAMS

INTRODUCTION

Eight principles have been placed under the "programs" heading. The distinguishable characteristic for these principles is that they emphasize instructional activities in vocational education.

Principles presented in this chapter are as follows:

- Career Education
- Comprehensive
- Curriculum
- Families of Occupations
- Innovation
- Job Entry
- Safety
- Supervised Occupational Experience

Although these principles represent the preferred practices in vocational education emphasizing instruction, they also (of course) involve people and processes.

CAREER AND PREVOCATIONAL EDUCATION

THE PRINCIPLE

The career awareness and prevocational education components of career education complement vocational education.

AN OLD IDEA REBORN

The idea that vocational education students should have a prior experience (called prevocational) education is not new. At the same time that public schools were struggling with introducing vocational education into the curriculum, there were ongoing discussions about programs of intermediate or prevocational education. In 1910, Snedden saw the need for "intermediate vocational education" to meet the needs of persons between the ages of fourteen to sixteen. Snedden (1910c) believed that this new program should be practical and productive, and at the same time lead toward profitable occupations. However, there were several difficulties and uncertainties. At that time specialization was the rule in industries, but Snedden felt it would be undesirable during the prevocational period for pupils to specialize their work. Rather, the introductory phase should be broad, and (as far as possible) should lead to fundamental forms of skills and comprehension of large principles.

Trying to reconcile the need and desire to see youths trained in areas that would lead to skilled jobs and advancement with the trend of industry toward specialization created special concerns. Snedden, however, saw many industries that had large numbers of highly specialized workers whose jobs were all based on a few tool-forms—hand and power—and on general knowledge and experience with materials. It was in such groups of industries that introductory vocational education could be developed that would provide fundamental training and a wide range of experience leading to subsequent specialization.

Prevocational education became increasingly important as vocational education developed and expanded. Snedden (1920) expressed his point of view in this manner: "The term 'prevocational education' at present seems more commonly to be used to designate programs of instruction and training designed to assist an individual in making an intelligent choice of an occupation, through giving him [sic] opportunity to participate in a series of practical experiences related to many vocations" (p. 578). Snedden went on to point out how the importance of prevocational education "increases in proportion as intelligent vocational education guidance develops, on the one

hand, and varied opportunities for systematic vocational education are established on the other" (ibid.).

CONTRIBUTIONS

Career education and vocational education are parallel in several ways. Each has a heritage of implementation problems together with a rationale that is, each in its own time, remarkably alike. Barlow (1973) uses the speech of Senator Carroll S. Page (1912) as a sole reference in identifying the historical antecedents to career education. From Page's Senate speech, Barlow identifies twelve concepts about vocational education that find a parallel in career education. Three of these may be labeled as (1) awareness, (2) decision making, and (3) lifelong process. They provide a sound rationale for the principle under discussion.

These same three areas have been identified by the Advisory Council on Vocational Education (1968) as being characteristic of a unified system of vocational education. According to the Council, an adequate system of vocational education should have the following characteristics:

> 1. Occupational preparation should begin in the elementary schools with a realistic picture of the world of work. Its fundamental purposes should be to familiarize the student with his [sic] world and to provide him with the intellectual tools and rational habits of thought to play a satisfying role in it.
>
> 2. In junior high school economic orientation and occupational preparation should reach a more sophisticated stage with study by all students of the economic and industrial system by which goods and services are produced and distributed. The objective should be exposure to the full range of occupational choices which will be available at a later point and full knowledge of the relative advantages and the requirements of each (p. 50).

Of the remaining twelve characteristics, two deal with postsecondary and adult levels and support the concept of lifelong education. Again, these are fundamental concepts related to career education.

Prevocational education may be conceived as either a part of career education or, as the name implies, a part of vocational education. The actual placement of prevocational education in relationship to career or vocational education does not materially affect the nature or need for prevocational

education. The separate acknowledgement accorded prevocational education in the statement of this principle is recognition of its special nature as a part of career education and/or vocational education.

Awareness. Awareness of the world of work and its many options is important to the individual. Awareness of an occupational role, regardless of the time it is developed, must occur before the individual acquires any inclination or preference to perform that role (and the same may be said about rejecting a role). The career education concept emphasizes the importance of the awareness function and recognizes that this event is appropriate for, although not limited to, the elementary years. According to Goldhammer (1972), elementary school children need to become aware of the competence needed for entering a self-fulfilling vocation. Achieving this goal is related to learning about work relationships within the community and the activities, social importance, and qualifications of workers in various occupations. Career education becomes an effort to help children learn about the world of work and to establish a foundation to help them emerge from the world of fantasy about work into the reality of understanding themselves and what their future life work may be.

The assumption that most individuals in our society will become engaged in one or more productive roles is fundamental to the awareness concept. It is appropriate, therefore, that public education provide experiences that expand the individual's information and awareness of the work world, its options, and its demands. The premise is that the degree to which students become aware of the world of work, understand the requirements for involvement in various occupations, and realize their own capabilities and possibilities will influence their ability to make the rational choices that lead most students to entry positions appropriate for them. It is this latter outcome that bears such a direct relationship to vocational education.

Decision making. Exploration and self-assessment are commonly accepted as needs of the pre- and early adolescent years. These years are frequently represented by middle schools or junior high schools. In these schools exploration is provided by a variety of in-class and extracurricular activities and is accomplished by flexible methods of teaching that emphasize giving students opportunities to plan and choose learning activities that are interesting to them. According to Evans, Hoyt, and Mangum (1973), the educational tasks assigned to these schools point to the appropriateness of "self-understanding in relation to career and work as a principal task of career education at this state" (p. 30).

Exploration and self-assessment are essential to making career decisions. They are also major functions of guidance at this stage of life. Students who

have a background of exploration and self-assessment together with appropriate guidance are most likely to arrive at positions that are suitable for them. Herein lies the impetus for prevocational education.

The majority of the work roles in society are within the scope of vocational education. It follows that the individual's exploratory experiences should include this domain. Such experiences are appropriately labeled as prevocational education. One should not interpret this to man that career education does not have an exploratory role in other than vocational areas, nor that self-assessment can occur only in the context of a prevocational program. Such is not the case. The need for occupational information on all occupations is stressed in career education.

Prevocational education provides a specific means to developing individual self-understanding, furthering decision-making skills, and increasing personal knowledge and skills related to the world of work. Career education includes prevocational education and, according to Herr and Swails (1973), may be viewed as an affirmation of the importance of preparing people for work and extending to the person the dignity and self-esteem that come from managing one's life through effective decision making.

Lifelong process. Career development is recognized as a lifelong process (Hoyt, Evans, Mackin, and Mangum 1972). In fact, Reinhart (1979) asserts that "it is now commonly acknowledged that important career development activities occur throughout one's life" (p. 61). Career education heeds this concept and seeks to have the person develop a positive attitude about the need for and the pervasive nature of education throughout life. There is an urgent need to begin this process as early as possible and facilitate its continued development in the public schools. Ultimately, at least in many respects, that is what career education is all about. However, the concept of lifelong learning promoted by career education initiates and reinforces a basic practice of vocational education to provide opportunities for continued learning in the vocations.

Adult educators who examined the Comprehensive Career Education Model (Miller 1973) found much that relates to adult career education. The development of career awareness, exploration, and preparation, and the need for intensified guidance services all had counterparts in adult career education. Only the processes and resources would have to be significantly changed (Reinhart 1979). The processes ushered in by career education are important to the work of vocational educators who work with adults.

SUMMARY

Career education is a viable concept that has a direct relationship to vocational education. Although the concept of career education is larger than

that of vocational education, vocational education composes a major segment of the activities of career education. Developing an awareness of work, coming to grips with job requirements and understanding of self, utilizing occupational information, and developing a positive attitude toward the need for lifelong learning are all complementary to and supportive of vocational education. Learners who participate in career awareness and prevocational components of career education prior to enrollment in vocational education will be more adequately prepared to exercise the choices that lead to a satisfactory and—it is hoped—fulfilling life as productive members of society.

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COMPREHENSIVE EDUCATION

THE PRINCIPLE

Vocational education is a part of the public system of comprehensive education.

SINGLE VERSUS DUAL ADMINISTRATION

Early leaders of the vocational education movement viewed vocational education as a part of the public system of education in America. However, who should administer such programs under what organizational arrangement was of concern to educational leaders and others in the early part of the twentieth century.

Prosser (1913) was quite clear in his belief that vocational education ought to be a part of the public education system and that vocational education was complementary to general education. Prosser contended that vocational education and general education each has a part of the other within it. General education is, in a sense, vocational training; and, on the other hand, all vocational education is at the same time general education. Prosser felt that the dominant purpose of vocational schools was to prepare boys and girls for successful wage earning, but that no school worthy of the name would fail to fit pupils for intelligent citizenship. He believed that the friends of vocational education recognized the advantages of literary and cultural training, but he urged the friends of general education not to minimize the educational value of definite, systematic, purposeful, intelligent, well-directed work.

Prosser's position in this area is best summarized in his own words:

> The American schools will become truly democratic when we learn to train all kinds of men [sic], in all kinds of ways, for all kinds of things. We will do this when the American people, including the American schoolmaster, begin to realize it is just as important to make a good blacksmith, a good carpenter, a good mechanic, as it is to make a good lawyer. We will never solve the problem of efficient vocational education until we are ready to take this position (1913, p. 406).

His words still have application today.

Strong union support existed for the addition of vocational education to the public educational system. Union leaders did not want preparation for

work to become the sole domain of industry (thereby lessening the influence of unions). At the same time, concern was expressed that the public schools become more democratic—a position shared by Snedden, Dewey, Prosser and others. Gompers (1914), president of the AFL, acknowledged that the American worker expected instruction in the public schools to be democratic. Accordingly, the public schools should institute industrial education or vocational education, based upon an exhaustive study of the industries to determine the industrial training required that is also most conducive to the physical, mental, material, and social welfare of the workers.

The issue of where such democratic education should take place was, however, a point of contention between Dewey and his former student, Snedden. Dewey (1913) took the position that it would be undemocratic to create a dual system of education, with vocational schools administered as units separately from other educational units. Dewey was very clear in his belief that the question of industrial education was fraught with consequences for the future of democracy. Proper development of industrial education could do more to make public education truly democratic than any other one issue under consideration, according to Dewey. Improperly developed, industrial education would accentuate undemocratic tendencies by fostering and strengthening class divisions both in school and out. Suffering a while longer from the deficiencies of the existing system was a better alternative than development along undemocratic lines by separating industrial education from general education, thereby marking off the interests of employers as separate from the interests of workers.

Snedden's (1910c) desire to see a separate system was based on his concern for providing vocational education that was efficient and not bookish and impractical. From Snedden's perspective, it was a question of whether vocational education required special administrative machinery for its conduct, direction, and inspection, including both lay advisory or administrative boards and school managers and teachers. Snedden feared that boards of education accustomed to the traditions of liberal education might allow vocational training to become bookish and impractical.

Dewey also saw the potential that vocational education had for influencing desirable changes in the existing systems of public education. Such changes were more than democratizing education; they could make education more practical. Again, in referring to the proposed separation of vocational education from general education, Dewey (1913) pointed out that the plan would tend to paralyze one of the most vital movements operating for the improvement of existing general education. He felt that general education was beginning to be vitalized by the introduction of manual, industrial, and social activities, and was beginning to recognize a responsibility to train

all youth for useful citizenship, including a calling to render useful service to society by earning an honest and decent living.

As to the future, Snedden was willing to grant the potential for vocational education to be successful under the administration of persons for general education. "In time," according to Snedden, "it will undoubtedly prove true that men [sic] of capacity as school administrators will come to understand the philosophy of vocational education, after which they will become competent as directors of the same" (1910c, p. 58).

Prosser's views on the matter of a dual system were very similar to Snedden's. It is clear that Prosser's preference was to have separate vocational schools, but he was willing to accept the possibility of effective vocational education as a part of a comprehensive school. Prosser and Allen (1925) saw no fundamental reason why local school boards that believed in vocational education and were willing to provide the necessary competent teaching staff and secure adequate funds, should not conduct effective vocational training for the community as well as any special or independent board.

Hope for the future of education as a single unit was evident in Prosser's writings. He and Allen believed that ultimately it would be possible for one local agency to provide adequate training of every kind needed by all the people of a modern democracy. He projected that day when American education would be "both in practice and theory, truly democratic agency for the adjustment of all the children of all the people and of all adult people, as well, to the changing economic and social demands of a dynamic and democratic society" (ibid., p. 217). Even those who were most adamant in their beliefs that vocational education should begin as a separate part of the system of public education were willing to grant, and even hope for, a single system of public education.

Support for vocational education as a part of public education was voiced by Philander P. Claxton, U.S. Commissioner of Education from 1911 to 1921. Speaking to the Southern Education Association in November 1912, Claxton made numerous references to relating the schools to the life of the child and making education practical. Claxton (1912) saw vocational education as the business of the schools and stated his absolute belief in vocational schools. He felt that schools were vocational for only one-tenth of the pupils, whereas they must become vocational for the other nine-tenths.

RESOLVING THE CONFLICTS

There is little question about the thinking of early leaders regarding vocational education as a part of the system of public education. The sometimes dogmatic attitudes of Prosser and Snedden in wanting to separate administrative structure ultimately gave way to their desire to see the Smith-

Hughes Act passed with a provision—not a mandate—for a separate administrative structure. Interestingly, both men conceded to the likelihood and even desirability of a single system of education, thus joining Dewey and others on this point in seeing vocational education as a force for improving public education.

In fairness, it must be recognized that the struggle goes on. The issue of dual versus single administration has not been resolved, although the predominant mode of state administration is a single unit. Within states, a variety of structures exist for administering vocational education. These structures include vocational facilities that are separate from other secondary and postsecondary facilities and that, in some cases, represent an administrative arrangement that includes a lay board separate from that for the rest of the educational program. Regardless of the sometimes dual systems, however, a variety of modern writers advance reasons for a single, comprehensive system. Their collective thinking aligns with the concerns and ultimate thinking of the early leaders.

EDUCATIONAL INTELLIGIBILITY

Evans (1971) devotes an entire chapter of *Foundations of Vocational Education* to the contribution of vocational education in lending intelligibility to general education. Evans points out that vocational education is often thought to be antithetical to general education rather than complementary and necessary to each other. He describes how this complementary and necessary relationship exists. Vocational education provides a vehicle for teaching the content of general education; vocational education provides a reason for acquiring basic academic skills; and vocational education increases the holding power of the schools. These, according to Evans, are among the ways that vocational education lends intelligibility to general education.

Intelligibility can be viewed as a two-way street. According to Venn (1964), vocational education has to become an integral part of total education. He contends that the importance of general education to individuals and their success in occupational preparation, as well as to the preservation of national values, cannot be overestimated. Yet it is not sufficient for the great majority of youths and adults who work in today's society. Providing general education without occupational education ignores the facts of modern life; attempting one without the other is being totally unrealistic.

Conant (1959) also points out how vocational education enhances general education. In referring to students who have established vocational goals, Conant acknowledges that when students think that what is being studied in school is likely to have significance in later life, the study in question

takes on a new importance. For these students, there is less tendency to waste time or to hold negative attitudes toward schoolwork. Conant holds that vocational education should not be offered in lieu of general education, but should grow out of it, supplementing and enhancing it. Vocational education, according to Conant's view, is an integral part of the total education program.

RELEVANCY

Relevancy is closely tied to the idea of intelligibility.* Preventing dropouts, stimulating individual interests, and motivating to accomplish are among the effects of vocational education on the learner. When programs of instruction are relevant for learners, any or all of these influences may be evident.

Relevancy has been a long-term concern of vocational education. Cross (1975), in discussing the goals and roles of vocational education, points out that relevancy is a role that vocational educators have both recognized and attempted to fill for three-quarters of a century. Cross saw how continuing scientific and technological advances, together with the demands on today's students, require relevancy in vocational education regardless of the age, sex, or ability of the students.

It is important to recognize that neither the potential influence of vocational education on creating relevant public education nor the relevancy of the vocational curriculum itself will occur in isolation; they are most likely to occur in a comprehensive setting. The two elements must work together as part of a single system of education. O'Kelly (1971) makes the point in a succinct manner:

> Informed vocational educators should bury forever the discredited idea that vocational education stands on its own base. It is just one of several essential ingredients in the student's educational whole being (p. 113).

The contribution of vocational education to the individual and the total school program is noted by Conant (1967) in his study of the American high school. He sees the role of good instruction in such fields as business education, home economics, drafting, auto mechanics, tool and die work, and building trades as not being limited or measured by the marketable skills

*This separation may be artificial, as both may be achieved through vocational education.

developed. If vocational courses were removed from secondary schools, according to Conant, a highly important motivating force would vanish from the high school. Conant believes that vocational courses interest a certain type of youth who is apathetic about English and social studies and finds mathematics, foreign languages, and physics at the eleventh- and twelfth-grade levels too difficult. Conant's experience in visiting some schools that lacked comprehensiveness according to his criteria left him with the impression that, in these schools, certain types are far more inclined to be either dropouts or listless students, as compared with similar students in comprehensive high schools.

The point is significant. The impact of vocational education on individuals, the school, and the community is greatest when vocational education is provided in a comprehensive school setting. Leighbody (1972) provides a view of why this is true. He claims that it is impossible for vocational education and other education, whether called general or liberal, to be identified separately and treated as different kinds of education for different groups of people. Whatever philosophical grounds may have created such distinctions have been obliterated by modern technology and the present understanding of schooling.

REMOVING STIGMAS

Vocational education has not, according to many of its own leaders, been granted the prestige that it deserves. For a variety of reasons, the image held by the public does not measure up to what proponents of vocational education think it should be. The American public has been accused of intellectual snobbery and of believing that vocational education is all right for somebody else's children. Even vocational educators frequently encourage their own children to go on to college and earn baccalaureate or higher degrees. The accusation of snobbery certainly comes home to rest on the vocational educator's own shoulders.

Vocational education's stigma has developed in part because of the separation that has been evident in the operation of many programs. Leighbody (1972) notes that many persons reject vocational education for their children not because of a snobbish prejudice but because they fear that when their children enroll in a vocational curriculum they will be cut off from further education and deprived of future educational and career opportunities. Vocational education offered in a comprehensive setting as a part of a comprehensive educational system helps remove this parental concern.

If parental concerns about vocational education are not eased, vocational education cannot serve all of the persons whom it can benefit. Harold Howe (1967), former U.S. Commissioner of Education, projected a greatly

expanded role for vocational education. He saw an imperative for secondary education to train the majority of students to work for a living with the same care that it devotes to the minority who go on for baccalaureate or higher degrees. Howe expressed the view that the attachment of stigmas is from within the circle of educators as much as in the community. Equal time, equal status, and equal quality of instruction for vocational education require a review and revision by educators of their own attitudes. Unfortunately for many, vocational training is viewed as an awkward appendage to the academic curriculum. It has never quite fit and was not really wanted. Educators must be prepared to respect vocational education. Until that time, neither parents, students, community, or industry are likely to consider job training as a necessary function of the school system.

The need to change some of the present dualism to a single comprehensive program is not limited to secondary programs. Venn's (1964) study of postsecondary vocational programs resulted in findings, conclusions, and recommendations underscoring the need for a comprehensive approach in providing postsecondary education. Venn sees the "separate but equal" approach to vocational and technical education as bad theory and bad practice. Apartness has tended to identify vocational education as second-class education in the public's mind. Venn also feels that when vocational education is not respectable in the educational community, then parents have difficulty in advocating it for their children. Apartness has also resulted in vocational education being bypassed in the ferment over educational goals, methods, and standards, robbing it of valuable criticism and fresh ideas.

It is past time for these two conflicting approaches to education to be resolved. The changing nature of the work world raises the important question about whether isolation of vocational education will allow the needs of individuals to be met in our contemporary world. Venn believes that the separation has largely developed because general education has refused to be involved. Venn forecasts that it will be tragic for the nation if higher education fails to concern itself with the issue of comprehensiveness.

CHANGING EDUCATION

Developing a comprehensive system of education that provides both general and vocational education will not only remove stigmas from vocational education, but it will also help change the public system of education. A mix of educators from all areas of education has the potential to cause a rethinking of major positions now held in public education. Many of the present positions are not well thought out and fail to reflect a coherent philosophy

and set of consistent responses to questions about the purposes of education, the nature of the curriculum, the role of the teacher, and methods of instruction.

Dewey, early in the century, held high hopes for the potential influence of vocational education to improve education. Venn has more recently been an advocate of vocational education as a catalyst in changing public education. Prior to his death, Venn proposed to develop his thesis of restructuring the American high school, with vocational education as the impetus for change. Venn's position is as follows:

> Too few educators and public policy makers are aware of the possibility of liberalizing education, increasing individual freedom, and improving human values through a marriage of academic and vocational education. Can it be that the greatest change agent available to improve education lies in this union? Can we continue to believe that simply doing more efficiently what we already do in schools will be adequate? Can we imagine that simply applying technology to the methods of instruction will be an answer?
>
> The problem as to how this nation must change its educational system to prepare individuals to control and to live more effectively in a technological society is the overriding question (1972, p. vii).

Vocational education should not be made to fit into the existing system of education, but rather should become a principal feature of a new system. Feldman (1971) points out that vocational education must serve as the principal core of a modern curriculum, and that the remainder of the curriculum must be more fully and more consciously related to the importance of individual talent in life. Feldman's and Venn's views are similar and reflect a concern for the individual and the need to revamp secondary education.

The National Commission on the Reform of Secondary Education (1973) has also taken a stand on the role of vocational education in changing secondary schools. One of its recommendations says, in part, "Secondary schools must realign their curricula to provide students with a range of experience and activities broad enough to permit them to take full advantage of career opportunities in their communities" (p. 49). According to another recommendation:

> In grades 11 and 12, students should have opportunities to acquire hard skills in a career area of their choice. This

> training should involve experience in the world outside school and should equip the student with job-entry skills (ibid., p. 50).

The movement of support for this notion grows, but with little evidence of change occurring.

In discussing recommendations for career education in the curriculum, the Commission's report encourages educators to come to terms with the fact that, sooner or later, nearly every student must work. The Commission avows that there is a need to understand that future carpenters are as important as future teachers. Accordingly, schools must not foreclose from the future teacher the very useful option of becoming a carpenter.

It is clear that the Commission intends for the reforming of secondary education to include what they label career education and a single comprehensive program. Their view is that career education should be built on established curricula. At the same time, vocational education is seen as the most advanced and sophisticated of existing career education programs. The first step forward, therefore, should be the refinement and expansion of existing vocational programs. Vocational education is placed at center stage by the Commission for improving secondary schools in America.

The consequences of this principle to both vocational and general education account for the extended discussion of its ramifications. It is, however, the latter section dealing with changing education that ought to command the greatest attention of vocational educators. If vocational education can, in fact, lead the way to restructuring the American high school, as it has helped structure the American community college, questions concerning the image of vocational education, the students it attracts and serves, and the relevance of what it can do will have passed into obscurity.

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CURRICULUM

THE PRINCIPLE

Curricula for vocational education are derived from requirements in the world of work.

PREPARATION FOR WORK

Preparation for work was a primary motivation behind the early development of vocational education. The early proponents recognized that schools were failing youth and hoped that education based on occupational preparation would make schools more attractive and practical for adolescents. Snedden was clear in his understanding of the relationship between occupations and vocational education. According to Snedden (1910), the choice of materials and methods was primarily determined by the requirements of occupations or groups of related occupations into which workers have divided themselves.

Snedden illustrated how materials and methods related to an occupational area are useful in the instructional program and suggested that in the preparation of the machinist, practical work must be connected with the use of the lathe, the forge, the drill press, and other tools regularly employed in that calling. In relationship to work in a commercial calling, he indicated that practical studies are to be found in the actual work of bookkeeping, typewriting, business practice, and salesmanship. In the study of homemaking, the person would perform actual household tasks, such as needlework, cooking, cleaning, nursing, and the like, finding a concrete basis in experience for vocational study.

The influence of industries on vocational instruction was clear in Snedden's (1910b) presentation to the National Education Association. Snedden thought that it would only occasionally prove practical to teach specialized trades to persons aged fourteen to sixteen years. Snedden promoted the idea that the foundations for groups of related industries should serve as a basis for deriving productive practices and technical studies that are necessary for a broad instructional foundation, and that these at the same time would lead to possible later specialization in either the factory or trade school after the age of sixteen. He saw the possibility of dividing industries representing many hundreds of special subdivisions into a score or more of fundamental groups, each one of which possessed common characteristics in materials used, tools employed, and related technical studies. From this source he advocated deriving the content for vocational education.

The Commission on National Aid to Vocational Education (1914) held that appropriate instruction in agriculture and trade and industrial subjects was the occupation itself. The recommendations of the Commission related directly to this notion. According to their report, agriculture programs should provide opportunities for practice and demonstration work on a school farm and, in addition, should connect the teaching of agriculture with practical knowledge pupils gained on the home farm. The Commission held that the teacher of agricultural subjects should require pupils, as a part of the instruction at home, to carry on experiments and projects in such subjects as gardening, poultry raising, dairying, orcharding, small animal husbandry, and general cropping. Further, the Commission recommended that grants for teachers of trade and industrial subjects be used only in situations that required that at least half the time be given to actual practice on a productive or useful basis, either in a school shop or in a commercial shop, with the remainder of the school day being used for teaching related and general subjects.

OLD GOALS REVISITED

The relationship of vocational education curricula to the world of work is obvious. It may be that it is so obvious that the relationship is taken for granted. Yet there are those who criticize vocational educators for relating the instructional program of public education to business and industry. Regardless of these critics, vocational educators see the necessity of having vocational instruction closely tied to the world of work.

Vocational education has a heritage of orientation to the workplace; employment frequently serves as evidence of a program's success. That heritage continues to guide vocational education. As Koontz (1971) asserts, "Vocational education . . . needs to be occupation-oriented—and proud of it" (p. 315). Vocational students should be prepared for the world of work not only by having skills that will get them jobs, but also by knowing *how* to work. They need to know how to apply for a job, how to be reliable workers, how to get along on the job, how to give their best to their job, and how to grow in their work by developing personal skills and abilities.

The curricula of vocational education and employment go hand in hand. Current and future employment opportunities must be considered by curriculum planners. More specifically, as Tyler (1979) points out, studies of a given occupation are a most useful resource in planning a vocational curriculum. Further, identifying work force needs must be a cooperative venture. Industrial leaders know where current gaps exist and know about the nature of emerging occupations. Vocational education must obtain this information to provide programs that prepare persons for employment. The

technological revolution is not over; it is a fact of daily life. Additional or modified occupations constantly need initially trained or retrained employees (Cross 1975). As a result, the vocational curriculum should be adjusted to reflect work force needs and changes.

Employability and subsequent employment are among the goals of students enrolling in vocational education. Warmbrod (1972), in reporting on a national follow-up survey of vocational students, indicates that high school students frequently give their reason for enrolling in vocational education as preparation for employment.

Meeting the employment goal of students is a responsibility of teachers. Allen (1974) indicates that the vocational teacher's responsibility is fully discharged only when each student has acquired the skills and knowledge required by an occupation and can relate work efforts to personal needs and to the needs of society. At this point, individual goals are met and there is a congruence of personal goals with the goals of others in the community and the nation. An appropriate curriculum is an essential ingredient if this is to happen.

Relevance is a critical issue in vocational curricula. Relevance conveys the potential for employment and the ability to meet job requirements. McMahon (1975) recognizes that relevance of programs is either the greatest strength or the greatest weakness in vocational education. The struggle to achieve and maintain relevance in vocational education is basic to many of the decisions that are reached in planning and implementing programs. Unless graduates of vocational education are qualified for employment, the program has failed. In times of normal employment, jobs must be available or there can be no excuse for continuing to offer the program. The relevance of curriculum is a major determinant of the employability and the employment potential of the learner.

Maintaining relevancy in the vocational curricula is a never-ending task. As O'Kelley (1971) observes, in our ever-changing society, nothing remains unchallenged for long. Changing socioeconomic conditions and technological advances cause specific areas in a curriculum to become outmoded and outdated at a dizzying rate. What happens then? Nothing sensational, unless a curriculum team or a similar group has maintained surveillance over developments. When areas of nonproductivity or irrelevance are identified, the curriculum planning team, or perhaps individual members or groups, are brought back into action. Weak portions are deleted and replacements judged more suited to changing needs are installed.

In spite of projected change, the requirements of current jobs and the demands of the workplace exert powerful influence on the development of vocational curricula. Preparing for some nebulous future does not prepare

for living today. It is essential that students have instruction based on existing employment demands and that they are provided with a broad-based education that will help them adapt as the future dictates. It is through the ability to adapt that the challenges of change are met, rather than through abstract learning experiences that may never be required or used.

Success in vocational education instruction is, to a great extent, contingent upon curricula that reflect and respond to current occupations and appropriate instructional practices. It is then that the skill and knowledge required to enter and succeed in occupations are developed. Vocational education instruction should be, in every instance, based upon needs determined through a task analysis and upon an accumulation of facts regarding the available employment opportunities (Allen 1974).

As pointed out earlier, vocational education historically has been closely tied to job requirements. O'Kelley (1971) sees the importance of this relationship and pleads that it not change. Vocational educators have maintained a basic belief that the critical detailing of specific vocational competencies necessary for successful job performance is basic to curriculum design. O'Kelley's fervent hope is that future generations of teachers will not carelessly abandon this practical vantage point, as it is one of the foundations of sound vocational teaching.

Job requirements, the curriculum, and the person in the workplace are inextricably tied together. The survival of vocational education is a function of its successful contributions to the work force, and the learner's survival in the labor force is a function of being able to meet workplace requirements successfully. As jobs change, the curricula must change. As job requirements change, the workers must change. There must be opportunities for every worker, regardless of previous education and training, to improve personal occupational proficiency (Bundy 1972). The need for continuing vocational education that is created by labor demands, the knowledge explosion, technological improvements, and change affecting the total environment is self-evident. As Carter (1972) points out, each worker must be willing to bring up to par tarnished skills and to learn new ones as a means of preparing for the jobs of tomorrow. Olivo (1971) supports this contention and sees the retraining of older workers whose skills are obsolete or who face unemployment due to automation as an alternative to unemployment. Without such opportunities, the survival of the individual as a productive worker is in jeopardy.

Preparation of individuals for initial and continued successful participation in the labor force is a measure of vocational education's success. At the same time, the curricula of vocational education are a mirror of that success. To measure up to the demand, the curricula of vocational education must be derived from requirements in the world of work.

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FAMILIES OF OCCUPATIONS

THE PRINCIPLE

Families of occupations are a basis for developing curricula for vocational education at the secondary level.

ONE JOB OR MANY?

Change, options, and jobs are all a part of the vocational education milieu. In a contemporary view of vocational education, it is illogical to consider one of these terms without reference to the other term. Hobbs and White (1972) call attention to the past, when we were able to base our educational system and job preparation activities on a concept of stability. A person could prepare for a specific occupation and expect to work in it until retirement. Today, things are quite different. Any young person entering the world of work can expect up to six job shifts before retirement. The present generation is the first in America's history to face the task of educating young people to this new dimension of change.

One response to the new task described by Hobbs and White (ibid.) has been to alter the curricular pattern. Tomlinson (1971) reports on outcomes associated with such alterations and says there has been a shift from specific occupations to job clusters since the Vocational Education Act of 1963. Tomlinson stresses that the Vocational Education Amendments of 1968 encourage programs that are based on entry employment in occupational clusters or one of a group of related occupations as a reasonable objective for vocational instruction. Emphasis on narrow preparation for entry in a single occupation is being reduced to gain future flexibility and mobility. As Allen (1974) points out, the shift in curricular pattern includes training in job performance skills that represent a broad area in order that learners may be successful in a variety of occupational situations.

Families of occupations or occupational clusters meet several conditions confronting contemporary society. Maley (1969) describes these as (1) increasing geographic mobility, (2) the need to have effective mobility potential within an industry, (3) adaptiveness to technological changes, and (4) complexities associated with selecting one's life work. Thompson (1973) pictures the strengths of the cluster approach as overcoming two major problems faced by vocational education at the high school level. On problem is whether to prepare highly skilled students for employment in a wide variety of occupations or a single job. The cluster concept represents middle ground, with development of specific job-entry skills for a cluster of occupations. The second problem concerns population mobility and a definition of

community. Many high school graduates migrate to work in other communities. Being prepared for a family of occupations allows the graduates to find a variety of opportunities as they migrate.

CREATING OPTIONS

The cluster concept implies a building of options for learners. Job-entry skills that are common to a variety of occupational roles translate to more varied opportunities for the job seeker, as compared with skills taught in traditional programs. Barlow (1973) points out that a goal of vocational education is to bring occupational instruction to all persons of all ages in all communities. In keeping with this goal, and to simplify the variety of occupations to be considered, attention is being focused upon families or clusters of occupations rather than on individual jobs. This makes the problem of organizing instructional programs easier and at the same time opens up a much greater array of options for students. A clustering approach to vocations is also less threatening to schools and much easier than attempting to resolve the problems associated with thousands of job titles. More important, according to Barlow (ibid.), the clustering approach tends to avoid difficulties inherent in preparation for a single job.

The cluster approach is not without criticism. Thompson (1973) cites what he considers to be serious errors in logic regarding the cluster approach. Thompson does not believe that the assumption about what is common to a family of occupations represents what is most important. Accordingly, this leads to a second assumption that what is unique about a family of occupations is unimportant to the entry-level worker. Thompson sees this as erroneous and believes that a similar error is made when what is unique about an occupation is assumed to be more technical than the commonalities of an occupation and is thus assumed should be taught at the postsecondary level. These are errors in logic and are contrary to sociological analyses that reveal that persons in a profession within a family of jobs identify with what is unique in that family. In addition, Thompson avows that a more thorough approach to occupational analysis would reveal that what is unique to a job is not necessarily highly technical.

SECONDARY VERSUS POSTSECONDARY

Clustering families of related occupations for instructional programs is considered primarily as a secondary school adaptation. The National Advisory Council for Vocational Education (1968a), in describing a unified

system of vocational education, gave fourteen characteristics. One of these reads:

> Occupational preparation should become more specific in the high school, though preparation should not be limited to a specific occupation. Given the uncertainties of a changing economy and the limited experience upon which vocational choices must be made, instruction should not be overly narrow, but should be built around significant families of occupations or industries which promise expanding opportunities (p. 50).

Maley (1969), Thompson (1973), and Leighbody (1972) all see the cluster concept as having application at the secondary level, with specialized preparation in specific occupations being left, in most cases, to the postsecondary institutions. Leighbody (ibid.) advocates that "*specialized occupational preparation should be deferred until the post-high school period*" (pp. 173-174). Occupational education should have a prominent place in the high school, but with different objectives. Leighbody emphasizes that the high school years should concentrate upon vocational orientation, exploration, career planning, and vocational decision making. He claims that specialized training in a specific occupation for most high school students is no longer compatible with technological-economic realities, nor with societal norms. For students whose vocational maturity may warrant it, Leighbody calls for a cluster or career development curriculum. From this point of view, the three-track curricula of academic, general, and vocational education has not worked in American high schools.

The student's needs should be at the forefront of curricular decisions. Options for board preparation need to be available at each level of education, just as specialized preparation should be available to those who are committed to a given occupational role. Allen (1974) supports such options and calls for broad-base curricula that offer a number of cursory learning experiences in a large number of related occupational families appropriate for the orientation phases. However, he sees this as wasteful once a student begins to concentrate on a particular occupational area. Because each student is an individual and has unique needs, it is not possible to determine at what exact age the individual will begin or should begin to concentrate on one occupational area. Flexibility in curricular patterns is needed.

Keeping options open remains as a model for serving learners through vocational education. Secondary vocational curricula based on families of occupations are a way of extending options for learners.

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INNOVATION

THE PRINCIPLE

Innovation is stressed as a part of vocational education.

EXEMPLARY PROGRAMS AND INNOVATION

Introduction of vocational education into the public schools represented change. In 1914, the U.S. Commissioner of Education, Philander P. Claxton, appeared before the Commission on National Aid to Vocational Education (1914) and addressed the importance of changing the courses of study in rural schools. Claxton said there had been "almost a revolution in the attitude of public-school men—state and county superintendents and, in some sections of the country, those who have to do with the training of teachers in the normal schools—in regard to courses of study of the rural schools" (ibid., p. 12). A need to be adaptive to changing needs was evident.

Changes in the course of study would also require changes in other areas of education. Claxton told the commission that reorganization would be needed, and he noted that preparation of teachers different from the past would be required. He recognized that the laws that could be put on the statute books would not change the condition of the schools until teachers could be prepared for new roles. "A little girl from the city," said Claxton, "not knowing barley from oats, cannot teach agriculture in a flowerpot in the wintertime, yet they have been attempting to do that, largely" (ibid.).

Vocational education was viewed as a way to induce societal changes and, thus, as an instrument for innovation in society. Laura Drake Gill, also addressed the Commission on National Aid to Vocational Education and spoke about changes she saw important to a society: "One is an assurance that to every woman may come a free self-expression in a way; secondly, an assurance of absolute justice in the reward for their work; and third, that an assurance of respect shall come to her only in proportion as she renders a genuine contribution to the world's work" (ibid., p. 237). Gill sought these three outcomes from vocational education. In describing the commission's task, Gill further declared that the commission had before it one of the most urgent matters now facing the nation. She felt it had a direct relation to the nation's future happiness and to American prosperity. The introduction of vocational education into the schools then became a two-way street for introducing change both in school and society.

Vocational education's role as a change agent still exists. Shirley Hufstedler, first secretary of the U.S. Department of Education, was quoted in *Update* (1980) as saying she is

> . . . very much concerned about how vocational education moves into the next century. It [vocational education] can have an enormously creative influence in our society (p. 1).

INNOVATION AND RENEWAL

Innovation and renewal are a requirement in a dynamic society. Knowledge production now occurs in geometric proportions, and the technological nature of contemporary society stretches the ability of educators who want to keep pace. Hull (1971) underscores the fact that systematic renewal requires people to know their role responsibilities and to keep alert to emerging needs for change. Active organizations must develop staff and adjust work roles to accommodate demands of the occupational environment. Change and innovation is fostered through vital organizational structures.

Vocational education does not exist apart from the society it serves. Vocational education must adapt to changes that occur in society. If vocational education fails to maintain an ongoing relationship with society, students who complete vocational programs will find that they are not adequately prepared for existing productive roles.

INNOVATION AS IMPROVEMENT

The tie between research and innovation is conspicuous. Each has an ultimate goal to affect programs and bring improvement through change. Brandon (1971) notes that, unless the outcomes of research are put to work for greater student success, the research effort is merely an interesting exercise and is likely a waste, in view of other critical needs. The Illinois Conceptual Model for Operation of Program Improvement Activities (McCage 1980) clearly demonstrates the relationship between research and innovation. The four phases of this model include research and planning (as phase two) and development and testing (as phase three), respectively representing research and innovation.

Educational change based on research is slow. Hull (1971) makes some interesting observations in this area. He cites an overwhelming preponderance of research evidence that suggests that it has taken as long as fifty years to diffuse an innovation throughout the educational system. Although this leisurely rate of adaption has speeded up in recent years, the time lag

between the introduction of an innovation and its adaption remains a symptom of most school systems' inability to cope with change.

Too-fast adoption of new practices can also be a problem. Adoption that is too early occurs frequently in crisis-laden situations. When decision makers feel forced to make choices among alternatives without adequate information or careful attention to consequences of their actions, the decisions tend to emphasize symptoms and ignore underlying causes. A systematic procedure for analyzing prospective innovations has potential for preventing the careless adoption of innovations.

Innovative activities in vocational education received a major stimulus through the Vocational Education Act of 1963. Prior to 1963, innovative activities had been mostly on an individual basis, involved little or no statewide planning and involvement, and dissemination of results was sporadic. The 1963 act set aside monies for research, innovation, and demonstration activities. This legislation constituted a breakthrough in funding for these activities.

Initial efforts of Congress to stimulate innovation in vocational education failed to achieve the expected outcomes. The report of the National Advisory Council on Vocational Education (1968a) describes the problem in vivid terms. The report indicates that although impressive innovations were underway in many states, vocational educators were reluctant to adopt such innovations, especially when such innovations were developed outside the public vocational education establishment. The report further indicates that a willingness to adopt innovation often appeared to be more intense at the local level than at the national level; whereas certain state boards of vocational education showed the least progressiveness. The U.S. Office of Education was singled out as showing undue timidity in failing to endorse and press for innovations more aggressively. The lack of progress on a broad front led to recommendations of a more specific nature for the subsequent legislation, the 1968 amendments to the Vocational Education Act of 1963.

The vocational legislation of the sixties spawned innovative activities in vocational education that continued into the next decade. Research priorities were identified and implemented. Change was planned, and innovation was demonstrated through funded projects. Research findings were widely disseminated, and workshops were held to increase implementation of these findings. Program improvement became evident. All in all, vocational educators displayed a new sensitivity to innovative projects and research.

Vocational education legislation contributed to the development and expansion of career education. Funds from Part D, Exemplary Programs and Projects, of the 1968 amendments provided the resources that supported the beginnings of career education. Cook (1977), in speaking to the

Fifth National Conference on Exemplary Programs in Vocational Education, said that vocational educators should recognize and take pride in the fact that the Part D program in vocational education was active in the career education movement before it had that name. He felt that the involvement in and vocational education's contribution to that movement were both considerable and highly significant. It is doubtful that career education's expansion could have occurred in the seventies without vocational education's people or its dollars.

Instructional innovations have also been spawned by federal funds. The movement toward competency-based education appears to be a direct outgrowth of innovation funds in vocational legislation. The widespread adoption of competency-based curricula is evident through major curriculum consortiums. There is similar curricular innovation at the university level. The competency-based teacher education materials developed at the National Center for Research in Vocational Education are finding widespread use in the preparation of vocation teachers. Currently, competency-based leadership development materials are emerging as a result of the combined efforts of several states and universities. These instructional innovations will affect the orientation of vocational educators in a positive way and will help to keep the need for innovative practices prominent in the thinking of vocational education personnel.

Change is a certainty, and vocational educators can count on it. The pressure for change is constant, and each educational unit at the local, state, and university level should devise procedures for systematic review of innovative ideas. That evaluation must also include a reevaluation of the roles and purposes of the existing organization. Soul-searching of this type requires time and commitment to the need for improvement, but the entire process of adequately dealing with the requirements for change is essential if vocational education is to keep pace with contemporary needs.

Administrators are central figures in the adaption of innovation. Without encouragement, support, and resources, even the least significant adaptive and innovative behaviors are not likely to occur. People need support to change. Even the risk-takers need the knowledge that there is support for innovative behavior before they will give much time or attention to new directions and alternatives. In the final analysis, administrators, by being proactive in the area of innovation, will find that peer leaders in the ranks of vocational education can provide the impetus necessary to maintain the dynamics of change.

Maintaining the dynamics of change is central to organizational responsiveness to human and societal needs. The leadership role that vocational educators must fulfill in our educational system and the need to maintain an adaptive and responsive system of education add to the importance of innovation for vocational education.

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JOB ENTRY

THE PRINCIPLE

Persons are prepared for at least job entry through vocational education.

A CONSTANT FOCUS

Job-entry preparation is preparation for work. This statement, in spite of its tautological nature, reflects a purpose associated with vocational education since its emergence in America—a purpose that has been a distinguishing feature of vocational education. Prosser (1913) put the matter succinctly. "What is vocational education?" he asked. "How does it differ from general education?" Answering his own questions, Prosser responded, "General education prepares us to live well. Vocational education prepares us to work well" (p. 401). Snedden (1910c) sums up a discussion of the nature of vocational education by saying, "education whose controlling motive in the choice of means and methods is to prepare for productive efficiency is vocational . . . " (p. 13).

The Commission on National Aid to Vocational Education (1914) saw preparation for work as central to vocational education. The Commission's report presents its view on how to hold agricultural education to a distinctly vocational purpose. "The controlling purpose of this education is to be to fit persons over fourteen years of age for useful employment on the farm or in the farm home" (p. 80). Similarly, trade and industrial education "must have for its controlling purpose the preparation of persons over fourteen years of age for useful employment in a trade or industrial pursuit" (ibid.).

Contemporary definitions of vocational education convey an intent to prepare individuals for work and productive roles. According to Barlow (1971), vocational education is a social process concerned primarily with people and the work they do in our society; and, in addition to its concern with preparing people for work, it seeks to improve the work potential of the labor force. Evans (1971) adds that vocational education is that part of education that makes an individual more employable in one group of occupations than in another. By comparison, Evans says that general education is education that is of almost equal value, regardless of the occupation that is followed. Allen (1974) makes the same distinction. He points out that all forms of educational instruction, including vocational education, are devoted to student learning progress. However, it is only vocational education that is

directed toward preparing students for one of their major life activities—work.

Learner purposes are important in providing direction for vocational instruction. According to Allen (ibid.), the occupational goal of students should become the center of the instructional program, and the learning experiences necessary to prepare for this goal should serve as the basis for instruction. In expanding on his point, Allen indicates that instruction should be organized on premises related to student goals. These premises are that vocational education: (1) prepares students for an initial job or job advancement and helps sustain continuing successful employment; (2) is student goal-centered and directly related to employment; (3) is relevant to the social and economic conditions of our society and to the maturity of the student; (4) provides for successful participation as a citizen in our society; and (5) provides or accommodates other learning attainments that are necessary for successful employment and are required by the diverse group of students being served.

Preparation for successful employment is accepted as a proper function of the public school system. Although vocational education legislation has emphasized this role (one would not expect otherwise), the National Commission on the Reform of Secondary Education (1973) has also taken an affirmative stand on the issue. The Commission's recommendations regarding career education include the following:

> In grades 11 and 12, students should have opportunities to acquire hard skills in a career area of their choice. This training should involve experiences in the world outside school and should equip the student with job-entry skills (p. 15-16).

The Education Amendments of 1976 hold job preparation as central to vocational education. Title I, Vocational Education, includes a Declaration of Purpose, which says the act is designed to assist states so that persons of all ages in all communities will have ready access to vocational training that is realistic in the light of actual or anticipated opportunities for gainful employment (P.L. 94-482, Title I, Part A Sec. 101). And so, back to our tautology. Preparation for work is preparation for at least job entry.

A MEANS, NOT AN END

Job entry is a minimum guide for vocational practice. Job entry may mean the simplest level of activity in an occupational area and may range

upward to a highly specialized and technical role. One may be able to perform the latter without having been employed to do the former.

It is individuals who make the determination of what will be their point of job entry. The individual may choose to prepare for job entry that occurs during the high school years, during the postsecondary years, or after completion of a postsecondary program. Allen (1974) claims that vocational education instruction develops skills, knowledge, attitudes, and appreciations necessary for self-determination in occupational endeavors. Additionally, it provides learners with (1) the ability to make lateral and vertical movements in an occupation, (2) a foundation for productive excellence, (3) coping skills in the area of economics, and (4) the preparation to contribute constructively to the community and nation.

Job entry is not the sole principle to guide instruction in vocational education. The learners' purposes, as pointed out earlier, need to guide practice. Warmbrod (1972) found that some persons seek vocational courses to prepare for a job or to increase their proficiency in a job; however, others select vocational courses as a means to explore occupations, to prepare for further schooling, or to pursue an avocational interest. The determination of which goal is the primary motivating force for any one individual is based on multiple factors; however, occupational preparation becomes increasingly important as a motivating force for students as they move through high school, postsecondary, and adult education programs.

The diversity of reasons for why students take vocational education has created misunderstanding. There is confusion about where and when vocational education ought to occur, and who has responsibility for its administration. As Venn and Skutack (1979) put it, "The emergence of education as necessary for a work life as well as a private life and a public life has caused vocational instruction to be seen by many persons as a cure-all and by some as a solution for those whose expectations have not been met through traditional educational offerings" (p. 82). Regardless of the reasons behind vocational enrollments, job preparation provides general direction for vocational education.

Job preparation, especially first-job preparation, can be an unnecessary and undesirable limitation. To view vocational education only within the context of first-job preparation diminishes, if not eliminates, the potential of many features of contemporary vocational education. Leighbody (1972) believes that concentrating on first-job preparation increases the focus of occupational education as a supplier of beginning workers for local labor markets. A negative consequence is the lessening of efforts to prepare youths for careers rather than for entry jobs. Leighbody asserts that too much of the students' time is taken up learning applied practical skills, particularly in the high school, thereby de-emphasizing and leaving too little

time for the studies that are basic to later development and progress up the career ladder. Somehow, vocational educators need to exercise caution that job entry does not become a constrictive force in developing programs of vocational education. It need not and should not be.

Preparation for job entry and employability are more than skill development. Both have implications for career and personal living and for qualities sought by employers. These qualities may be standards of work or personal characteristics. Frequently, it is the latter that determine whether or not an individual is employable. Cross (1975) supports the idea that educators must also emphasize the human qualities and values needed to ensure employability of students who complete vocational programs. Employment and continued employability are evidence that vocational job preparation is appropriate.

Vocational education must serve diverse groups along the employment-employability continuum. Some groups need additional preparation for new roles at the job-entry level. Others need only to upgrade skills and add new capabilities. Still others have failed to ever become employable. A truly broad and comprehensive vocational program must be able to accommodate adults and adolescents who leave school with insufficient occupational skills. These groups require recycling opportunities, just as program completers do. The objective for this latter group should be easy reentry and exit from school into work-related study programs or work itself. The public system of education has a responsibility to provide educational opportunities leading to employability and continued employability for community residents who seek and need vocational education.

Preparing persons for at least job entry is a diverse task, and it involves change. As Cross (1975) points out, vocational educators already serve as change agents by providing all learners with at least a job-entry skill. The high schools are changing, in the process, to reflect broader goals in education—goals, incidentally, that have been more evident in postsecondary education. Job entry also implies an economic function and meeting labor needs. It is, however, the individual who is central in vocational education; and job-entry preparation should only guide, not dictate, how vocational educators provide learning opportunities and services in response to the individual's needs.

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SAFETY

THE PRINCIPLES

Safety is paramount in vocational education.

SAFETY AT FIRST

Safety and education for safety were early topics addressed in bulletins of the Federal Board for Vocational Education. Bulletin Number 31, *Training Courses in Safety and Hygiene in the Building Trades*, and Bulletin Number 47, *Industrial Accidents and Their Prevention*, were published in May and November, 1919, respectively by the Federal Board for Vocational Education.

Safety was viewed as a matter of education. According to the Federal Board (1919a), accident prevention was conducted principally as a matter of education and not merely as one of protection against physical hazards. Experience in accident prevention had conclusively demonstrated two things. First, three-fourths of all deaths and serious injuries in industry can be prevented. Second, in industries doing the most efficient safety work, two-thirds of the safety work has been accomplished through organization and education, versus one-third accomplished by means of mechanical safeguards or equipment. Clearly, accident prevention is more a work of education than of technical engineering.

EDUCATING FOR SAFETY

Safety is primarily an attitude. The safe worker is one who exercises a concern for personal safety and the safety of others. As the early industrial safety experts recognized, education for a safe attitude can dramatically reduce accidents.

Protection and conservation of human life, according to Allen (1974), require a positive attitude and an awareness of factors that constitute danger to an individual. Allen goes on to explain that some students are tempted to break safety rules as a matter of excitement, thus demonstrating an inadequate sense of responsibility. Novice students in a vocational education instructional setting may break rules or be accident-prone because of insufficient knowledge of safety factors. It is imperative that instruction inculcates a sense of responsibility in students and teaches them the necessary safety rules and practices.

Safe workers represent economic gains to employees and employers alike. Evans (1971) points out that companies that handle hazardous products or

processes probably spend more person-hours on safety training than on any other types of educational program. Weekly safety meetings for all supervisors or even for all employees may be mandatory. A review of recent accidents in the industry, suggestions for improved safety practices, and "pep talks" involving competition in the latest safety contest are frequently featured. The heavy economic penalities of a poor safety record provide the principal incentive for this type of training. As Allen (1974) notes, those who work for a living know that financial benefits are obtained from the reduction of bills for medical care, and increased earning power results from a low incidence of absence from work due to illness. The same results accrue to industry, and thus it is that instruction in health and safety becomes an essential ingredient in vocational education.

The role of the teacher as a model is important in educating for safety. As Allen emphasizes, vocational education teachers must practice and have a positive attitude about safety. It is inconsistent for teachers to insist upon safety practices without demonstrating a constant concern for safety in daily instructional activities. Since a certain amount of student learning is attained by emulation of adult attitudes and actions, the instructional setting, including the teachers' attitudes toward safety and the conservation of human life, must be a positive model.

Living is a continual interplay between individuals and an environment that contains many dangers to human life and health. A reduction of injuries and illnesses can result from appropriate instruction and an application by students of what has been learned. Vocational educators are in a unique position to provide the necessary knowledge and to help develop safety and health practices in students, thereby ultimately helping to improve the quality of life for all.

Federal involvement in safety has become pronounced during the seventies. The Occupational Safety and Health Act has focused attention on the well-being of workers and learners. Many states have adopted legislation complementary to federal law. The goal of government intervention is to enrich the life potential of individual workers and to reduce the impact of unhealthy working conditions on future generations.

Vocational educators are an important component of efforts to improve worker health and safety. Safety is paramount in vocational education.

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SUPERVISED OCCUPATIONAL EXPERIENCE

THE PRINCIPLE

Supervised occupational experience is provided through vocational education.

AN EARLY EXPECTATION

The importance and need for occupational experience in vocational education were stressed early in the century. Snedden (1910c) was clear about his position regarding the role that occupational experience should play in the education of the worker. Furthermore, as one of the early writers on vocational education, Snedden gave prominence to the desirability of occupational experience. The following examples of Snedden's statements illustrate his concerns and suggestions:

> Between the experience of the worker and the studies in the schools, there have been too few points of contact to serve to create true pedagogical efficiency. From this point of view, for example, in the making of the true agriculturist of middle rank, we should expect the boy [sic] to participate for a part of each day, or week, or month, or year, in the actual productive work of the home or school farm (pp. 37-38).

Snedden, in referring to the making of the mechanic, says:

> We should expect the boy [sic] to go to work either in a school, a shop, or a factory, where he could begin at the simpler stages of productive work, and where, from day to day, his work should be squared up with the conditions of actual production. This phase of his training should be such as to require shop clothing, shop hours, shop associations, the standards of shop production, and some knowledge, and perhaps some sharing, of the actual value of output (ibid., p. 37).

Snedden adds:

> The foregoing analyses suggest that in many fields, the most effective vocational education might be achieved by

> the systematic cooperation of agencies. We already have, in the United States, for example, schools in which the boys [sic] give a part of the time—a half of each day, or alternate weeks—to shop-work in actual shops . . . (ibid., pp. 38-39).
>
> It has been already pointed out that the practical work of the vocational school should conform approximately to the prevailing condition of industry. This also involves the idea that the output should have a market value, and that it should be disposed of, partly to the profit of the school, and partly to the profit of the individual worker. It should be quite clear that the motive of the student can be greatly stimulated by this procedure, and that it is socially uneconomical to have students in this work confine their efforts to unproductive exercises (ibid., pp. 61-62).
>
> Genuine vocational education must involve considerable work under actual conditions of production with a usable and valuable product resulting; but the production of a usable product must be subordinated to the educational necessities of the pupil (Snedden 1910b, p. 782).

Prosser (1913) had much the same point of view as Snedden. Prosser felt that successful vocational education required the combining of two elements: (1) practice and thinking about the practice, and (2) doing and thinking about the doing. Prosser's view was that, in vocational education, practice and theory must go hand in hand; the more intimately they are related to each other, the more the school will contribute to the learner's immediate success in the shop and equip the person for mastery of one's calling.

Practical experience and financial incentives were two areas of emphasis in the writings of Snedden and Prosser. Whether the occupational experience occurred in the workplace or in the shop was not critical to either writer. It was, however, important that the productive experience be as much like the actual workplace as possible. In addition, Snedden believed that the student should benefit from some form of remuneration.

Snedden and Prosser worked closely in promoting vocational education. Together, their influence was important in providing direction for the development of vocational education. That direction included a requirement for occupational experience. Prosser, as a member of the Commission on National Aid to Vocational Education, eventually saw his position on this matter represented in the recommendations of the commission.

Occupational experience was a recommended requirement of the commission. The requirement, although stated differently for agriculture and trade

and industrial education, applied to both areas. The commission's (1914) report reads:

> Actual practice in agriculture is fixed as one of the minimum requirements. It is universally recognized that agriculture cannot be taught in isolation from actual practice. The proposal of the Commission is, therefore, that such teaching should be accompanied by directed or supervised practice in agriculture, either on the home farm or on a farm provided for by the school, for at least six months a year. This will give the schools an opportunity to conduct winter courses of agriculture and follow it up through the summer by supervising the practical work of the pupils in farming (p. 74).

In regard to trades and industrial education, the Commission wrote:

> It is an established principle that trade and industrial education cannot be given successfully by theoretical study alone, but must be accompanied by shop practice on a useful or productive basis or as nearly as may be on such a basis. The consensus of opinion is that at least half the time of pupils should be given to shop practice, and that such instruction should extend over a sufficiently long period to give the amount of continuous practice necessary. The Commission believes that one-half of the school time to such shop practices for not less than nine months per year is a proper minimum, below which practical industrial education should not be given (ibid., p. 75).

An interesting sidelight in the area of occupational experience is related to the activities of the Federal Board for Vocational Education. Although the Smith-Hughes Act did not provide for the distributive occupations, the Federal Board was authorized to do studies in the area of commerce. One of the Federal Board's (1918b) early publications dealt with the retail occupations. The relationship of the school and community and provisions for occupational experience are given attention in this bulletin. Two quotes reveal the Federal Board's thinking on these matters:

> Particular attention is called to the ways in which the public schools of a community, particularly the high school, may cooperate with stores in the preparation of promising

> young people for retain selling as one of the most attractive lines of commercial employment (p. 6).
>
> The merchant's part in this program is not only important, but absolutely necessary for the successful working out of a course in retail selling. A chance to have practice work is good, but such practice work must be considered, planned, and followed up by the store authorities as well as by the school (p. 37).

KEEPING A GOOD THING

Occupational experience is clearly an ingredient that has remained "center stage" in vocational education. Until 1963, agriculture students were expected to gain supervised farm experience on the home, school, or some other farm as a part of their agricultural education program. In trades and industrial education, the requirement of thirty hours of instruction per week, with at least one-half devoted to practical work, dominated the early structuring of these programs; the effect remains today. And in spite of various difficulties, supervised occupational experience is generally accepted by vocational educators with few reservations.

Experience is a major force in the learner's development. In essence, Lamar (1972) calls experience the "heartbeat" of the total educational process, and occupational experience the "action ingredient" in a sound program of vocational education. This being the case, it is easy to conclude that occupational experience must be a basic part of each individual's vocational education if the person is to be prepared adequately for employment.

Employment is a goal of vocational education, and it is logical that vocational educators expand mechanisms to strengthen the transition from school to work. Cooperative work experience (CWE), a representation of supervised occupational experience, is such a mechanism. According to Evans (1971), cooperative work education involves cooperation between the school and employers that enables students to receive part-time vocational instruction in the school and on-the-job training through part-time employment. A primary goal of CWE is to prepare students for gainful employment.

Direct experience in the work world keeps students in contact with recent developments in business and industry. Teachers who supervise these students reap similar benefits. Schools, by contrast, often lag behind the world of work in terms of techniques and equipment. Evans (ibid.) underscores the compensating values of CWE programs by noting how adaptability to changes in labor market demand characterizes CWE programs. By contrast,

other forms of vocational instruction that are limited to school-operated laboratories can become quite "out of tune" with labor market demands, partly because many vocational teachers are prepared to offer instruction in only one or a relatively small family of occupations. If such instructors have tenure and are not retrained, the school has little flexibility in dropping outdated programs. In this latter area, education has yet to find creative solutions. However, CWE is one alternative to help solve this problem.

Cooperative work experience also carries connotations for career decision making. Borow (1974) recognizes three broad goals pursued through CWE programs. First, through a training station the student learns skills, duties, and practical understandings associated with the occupation. These are cognitive learnings. Second, the learner acquires a work ethos, a set of attitudes, rules of etiquette, and interpersonal skills involving relations with fellow workers, supervisors, and clients. These are what society, and especially one's employers expect of employees. Third, the youths enrolled in a cooperative education program may come to know themselves better in terms of the strengths, limitations, aspirations, and personal values they hold. These personal attributes can, in fact, be shaped and fortified by the work experience itself. Such goals are achieved with greater certainty through supervised occupational experience than within the school, where "real world" testing is difficult to accomplish. Historically, vocational educators have been the leaders in using the community as a training laboratory. This is especially true in cooperative education and work experience programs; however, more extensive use of the community is possible (Weatherford and Koeninger 1974).

Students gain money to spend as a result of cooperative work experience. Huffman (1971) acknowledges that an integral part of cooperative vocational education program should be paid employment. The student-employee experiences are more like those of full-fledged employees than those of observers on a field trip. Full-fledged employees work for wages, not just for experience.

Being somebody and feeling good about oneself can be related to earnings. Adolescents place importance on being able to acquire minimum goods (the nature of those goods depends on individual values) because this displays their ability to make their own way. Although immediate earnings are not generally a major concern to vocational educators, those earnings are important to students.

Society also gains an economic advantage through cooperative work experience. The wages paid to students add to the flow of resources in society. Some argue that paying student learners takes jobs away from full-time workers. Most frequently this is not the case, as students are part-time

employees filling jobs that quite often are created to provide learning opportunities and relief for short-handed employers. Employers gain in other ways (discussed later), and society receives an immediate economic gain when students are employed as a part of their instructional program in vocational education.

Supervised occupational experience is an important means of individualizing instruction in vocational education. The intent of a functional supervised occupational program is to personalize learning. Students have opportunities to capitalize on personal strengths and to fill in gaps in knowledge and skills. Each arrangement for training should be based on where the learner is, where the learner is going, what needs to occur to make this possible after considering the opportunities that exist in a given workplace. Although the ideal may not always be possible, it ought to guide practice. Lamar (1972) indicates that individualizing instruction in vocational education through cooperative work experience is crucial if the program is to be successful. Rasmussen (1973) also sees cooperative work experience as a way to individualize the instruction as the learner specializes in preparation for work.

Supervised occupational experience also serves as a way to provide instruction for small numbers of students. If suitable training stations are available, cooperative education can be offered in a given occupational field for a small group or even for one student. Other types of vocational education generally require at least ten students in a given occupational field before the program can be operated economically (Evans 1971).

Workplace experiences influence and develop students' affective behaviors. Underscoring Borow's earlier comment, Evans (ibid.) indicates that demands, expectations, standards, relationships, and values are tested and developed in the workplace in ways not possible in the classroom. Work atmosphere is extremely difficult to reproduce outside of a real work situation, and the importance of promptness and regular attendance at work are much more demonstrable on the job than in school. Moreover, because of the difficulty of marketing some goods and services produced within school laboratories, it is also difficult to develop realistic attitudes toward speed, quality, and efficiency in school-based programs. The variety of growth opportunities available through supervised occupational experience are unmatched in the school.

Placement in a successful work setting for students seeking employment is often considered the ultimate test for vocational education. Supervised occupational experience programs increase the possibility of successful placement and may directly lead to an employment opportunity. McMahon (1975) recognizes that cooperative education is able to place students in

almost any place where work is done. He sees, as an added value, the possibility that students whose work has been satisfactory will be hired by the employer. Since placement is also an important function of the school, teachers and counselors should welcome this assistance.

Potential employers accept participation in supervised occupational experience as a means of gaining qualified employees. By assisting in the development of future members of the work force, employers gain a bird's-eye view of the prospective employee and a clear opportunity to offer employment to those who best fit in with the needs of their enterprises. Employers know the students' strengths and weaknesses, and the students have an ample opportunity to determine whether or not a particular field of work (and with those particular employers) is best suited to the students' own needs. The placement rates for CWE are higher than for any other type of occupational education (Evans 1971). Huffman (1971) notes, too, that employers gain a source of selected and motivated workers who have chosen a career in keeping with their interests and aptitudes. Studies indicate that employers keep a large proportion of cooperative vocational education students after they have graduated (ibid.).

Evans (1971) provides more data regarding the tie between placement and supervised occupational experience. He reminds vocational educators that the Advisory Council on Vocational Education was established to evaluate the implementation of the Vocational Education Act of 1963, and has shown that cooperative education has had the best record of all vocational programs in terms of the proportion of students placed in the occupations for which they were trained. According to Evans, typical research studies show that more than 80 percent of the graduates of CWE are so placed. Supervised occupational experience remains prominent as a bridge between education and work.

The merits of supervised occupational experience are high. Furthermore, there is little to suggest that such experiences will be less important in future programs of vocational preparation. In practice, the opposite ought to be true; more vocational educators should be active promoters of supervised occupational experiences. These experiences make sense. Additionally, each student in vocational education should have the option of participating in a supervised occupational experience through vocational education.

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CHAPTER 5
PRINCIPLES AND PROCESSES

INTRODUCTION

The seven principles in the "processes" group emphasize procedures that vocational educators prefer in their efforts to effect change and improvement in vocational education.

Process principles, in the order in which they appear in this chapter, are as follows:

- Advice Seeking
- Articulation and Coordination
- Evaluation
- Follow-Up
- Legislation
- Planning
- Research

These processes also clearly affect people-related outcomes and total programs of vocational education.

ADVICE SEEKING

THE PRINCIPLE

Advice from the community is sought in providing programs of vocational education.

EARLY BEGINNINGS

Vocational educators established formal procedures for seeking advice from the community before the Smith-Hughes Act was passed. In 1913, an Indiana vocational education law required boards of education or those administering approved vocational schools and departments for industrial, agricultural, or domestic science education to appoint an advisory committee composed of members representing local trades, industries, and occupations. The duty of the advisory committee was to counsel with and advise the board and other school officials on the management and supervision of vocational schools or departments.

At about the same time, Prosser (1913) advocated that vocational education require the help of laypersons. The concern was that, although educators knew books, children, and methods, they did not know life and industry. Successful vocational schools, according to Prosser, would be carried on through the cooperation of educators with the employers and the workers who knew the requirements of the varied occupations outside the school. These persons would be able to assist those in charge of education to make it practical so that pupils would be equipped for successful roles as workers.

The 1 April 1915 minutes of the National Society for the Promotion of Industrial Education (NSPIE)[1] record the opinion of the survey committee for the Minneapolis survey regarding the importance of advisory groups. The survey committee believed that any attempt to develop vocational programs for any trade or occupation should be preceded by the creation of an advisory committee for that trade or occupation. According to NSPIE (1915), advisory committees should be made up of employers and employees; and when the trade is organized, employees should be representatives of those trade unions. The minutes also elaborate on the appropriate role and areas where advice ought to be sought.

[1]Minutes National Society for the Promotion of Industrial Education, April 1, 1915.

Clearly, seeking advice from members of the community was viewed by early leaders as essential in establishing and conducting vocational education programs. A similar attitude prevails today.

MODERN RATIONALE

Advisory groups, as representatives of the community to be served, have been mandated by federal legislation. The 1976 Vocational Education Amendments (P.L. 94-482) require advisory groups to be established at local, state, and national levels. Minimum numbers and areas to be represented are specified; however, it is important to look beyond the legal mandate and understand why community advice is so important.

Work, jobs, and change. Vocational programs need to keep pace with changes occurring in an occupational area. The ability of educators to stay up to date with changes in occupational requirements and developments is extremely limited and would require major involvement in each of the various occupational settings represented in a vocational program. Although this level of involvement is impractical, representatives of such industries and businesses can share their experience and knowledge and give advice that can help vocational programs stay current. Dunham, Simmons, Whitten, Harris, and Gentry (1978) assert that advisory groups are essential to vocational education because of the dynamic changes taking place in the nation's occupational structure.

Expertise needed. Advice seeking from the community is, in essence, an attempt to capitalize on the expertise that resides within the community. Advisory groups provide a rich resource for managing the affairs of vocational education. Competent people in the community possess a greater collective understanding of what ought to be in the curriculum of a vocational education program greater than do the educators who are responsible for teaching the content of vocational education. Truth—that which vocational educators teach as verified knowledge—is found through the collective experience and advice of qualified persons in the community. In short, the community represents a virtual storehouse of human resources that is opened to vocational educators when a community interaction program is implemented (Weatherford and Koeninger 1974). Tapping that storehouse is important.

Because educators cannot possibly know how to do all that ought to be taught, teachers must be viewed as managers of the learning environment who use resource personnel to assist in teaching selected skills. Persons in the community who are more occupationally competent add strength to the instructional program and supplement the limitations that any one person brings to the classroom.

Schools and community. Public schools in America belong to the citizenry. Accordingly, the public should be involved in establishing educational policy. Advisory groups representing the community are a mechanism for involving the public. Further, when public schools use advisory groups, democracy is put into action. Citizen participation in school affairs serves to educate for participation in all public affairs (Hamlin 1960).

As pointed out in chapter 1, it is policy that provides the backdrop for the operation of vocational education. Without appropriate policy, vocational education programs cannot reflect their own principles and philosophies. It is policy that makes preferred practices possible.

Public involvement in vocational education is more than providing a right based on ownership. Through involvement and giving advice, a community begins to develop an attitude that it is "our program" rather than "their program." In referring to earlier local advisory committees, Evans (1971) points out that when both employers and employees are involved from the inception, they tend to be satisfied with the results. Weatherford and Koeninger (1974) also note that the more a person is involved in an activity, the more likely the person will support that activity. The process of education becomes a partnership between the community and school. Dunham et al. (1978) concur on this point and see many benefits from involving those expected to participate and profit from vocational education in its development, implementation, and evaluation. This notion applies to all aspects of the community—employers, students, and parents. Vocational education, a part of a system of public education, offers unique opportunities to seek advice from the public and to involve citizens in the operation of *their* schools.

Advisory council. Advisory councils are a good way to provide involvement, gain advice, and build on the expertise of the community. Advisory councils go beyond the informal contacts of industry-education cooperation and provide for a formalized approach that puts industry opinion on record. According to Burt (1971), advisory councils are the most effective way to manage long-range and extensive in-depth involvement of industry and business in education. Educators must take the lead in developing and formally organizing advisory and cooperative committees. Vocational educators will find that advisory councils are one way to implement this principle. Advisory councils make good sense and have a good pay-off for vocational education.

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ARTICULATION AND COORDINATION

THE PRINCIPLE

Articulation and coordination are central to the purposes of vocational education.

SOME DEFINITIONS

Articulation and coordination are terms that require definition. As used here, *articulation* refers to forming or fitting into a systematic whole. *Coordination* refers to agencies or organizations working or acting together. Articulation, in this instance, may be viewed as having vertical properties and coordination as having horizontal characteristics. Put another way, articulation provides for building on learnings in lower-level programs without unnecessary repetition and duplication in higher-level programs (e.g., secondary vocational education with postsecondary vocational education). By contrast, coordination occurs between public vocational education and public and nonpublic agencies providing services to learners (e.g., vocational rehabilitation, public health, employment security, proprietary schools, employment and training programs, and others). Together, articulation and coordination strengthen vocational education and support the notion that the effects of vocational education are cumulative.

A RECENT CONCERN?

The activities of the Commission on National Aid to Vocational Education reflect a concern and set an early perspective and precedent for coordination. In 1914, the commission sent questionnaires to all state superintendents of instruction, to superintendents of schools in cities with at least ten thousand inhabitants, to selected rural school superintendents in each state, to certain representative employers of labor, and to all national trade unions affiliated with the AFL. In all, 1,157 questionnaires were sent (Commission on National Aid to Vocational Education 1914).

The commission's interest was in determining the need for grants for vocational education and the current availability of vocational training. Employer needs and attitudes about vocational education were also sought. Similarly, union attitudes toward vocational education were polled by the commission.

Hearings held before the commission also demonstrate a sensitivity to duplication of effort in vocational education. The commission heard representatives from a variety of federal agencies, including persons from the

U.S. Departments of Interior, Education, Commerce, and Agriculture, and the U.S. Bureau of Labor Statistics, as well as the U.S. Navy and the U.S. Army. In addition, individuals representing an array of organizations also appeared before the commission. Prior to the hearings, the commission provided a list of questions to those who were to appear. The questions sought to determine the extent of current efforts in vocational education and the need for and the nature of federal grants for vocational education.

Construing the activities of the commission as specific evidence of a concern for coordination and articulation is erroneous. It does seem warranted, however, to suggest that the commission was intent on coordinating (1) programs related to the nation's need for training and (2) grants to states that would not duplicate present programs.

TODAY'S ISSUES

It it through well-articulated and equally well-coordinated efforts that vocational education is most likely to meet human needs. Planning is a major element in developing articulation and coordination in vocational education. Planning is equally important in meeting population demands and needs for vocational education. At the same time, planning done with articulation and coordination in mind should produce greatest efficiency in the expenditure of tax dollars and greater effectiveness in assisting individuals meeting personal needs. Strong (1974) emphasizes the need for planning between various levels offering vocational education. He says there is need to articulate planning between secondary and postsecondary institutions to meet the needs of individuals as well as the needs of the labor force. Planners in vocational and technical education must work together to maximize their ability to serve the target populations—high school youth, postsecondary youth, and adults.

Credit for prior learning, however acquired, is an outcome of good articulation. Evans (1971) refers to articulation problems that can arise when youth take vocational education while in high school. Students who acquire an excellent secondary school background in a vocational field and who desire further vocational education in a postsecondary school too frequently find they are given no credit for earlier instruction and are forced to repeat courses that they had completed successfully in the high school. Also, some students who have acquired skills through work experience or private proprietary school instruction face the same difficulties. The automatic awarding of credit as a result of completing a secondary school course seems to be unacceptable to most postsecondary school instructors. Whereas the community college expects senior colleges to award credit automatically for

courses completed in the community college, they seem unwilling to consider a similar arrangement with the high school.

Ideally, the curricula of the secondary and postsecondary schools should be arranged to complement each other. Students who make a decision prior to high school graduation to enter the higher levels of an occupational field may then enter programs that begin in the high school, flow without interruption into the community college, and, if desired, could lead into a baccalaureate or even a graduate school program in that occupational field. Such an integrated system of occupational education assumes a career ladder extending from the bottom to the top of an occupational field. More importantly, it builds on the cumulative effect of vocational education and assumes that instructional personnel in all levels of education have respect for each other and are willing to work together for the good of the student.

The good of the student is an important goal of articulation. Minelli (1971), in describing a Ford Foundation project in Michigan, cites project principles around which occupational programs should be designed. Minelli emphasizes that the educational experience must be vertically articulated from the beginning of formal preparation to completion. According to Minelli, the individual's educational experience is continuous from the elementary and junior high schools, through subsequent phases of formal education at the senior high school, the community college, and into initial employment. Education that is based on this principle minimizes slippage, wasted time and effort, and frustration for the learner while maximizing the good for the student.

Articulation, besides the structural dimension, has a programmatic aspect. Cumulative learning focuses attention on program levels within agencies and institutions. These program levels also need articulation. Such efforts should result in outcomes similar to those sought through the articulation of multiple education levels and agencies. The smooth flow of students, with little or no slippage and efficient and effective education, must be the goal.

In addition to advancing the good of students, a rightful expectation of articulation and coordination is improved use of available dollars. The National Advisory Council on Vocational Education (NACVE) (1971) expressed concern for coordination of vocational education as well as labor supply programs. Much of the inefficiency of the present uncoordinated and overlapping of vocational education and labor programs is widely recognized, and solutions to these weaknesses have been proposed to Congress. Although these proposals may bring some order to labor training, they fall far short of what is needed. According to NACVE, the proposals fail to make use of mainstream secondary and postsecondary vocational and technical career development programs and may create a dual system of public

education. Clearly, a dual education system is not a wise use of public monies.

The concern for coordination is broader than just a dual system of public education, however. (The danger of establishing a dual system by itself is sufficient cause for alarm!) Williams (1971) highlights program needs for special populations that have applications in all of vocational education. That is, there is a need to coordinate all agencies providing services for students in vocational education. Having several agencies working in an uncoordinated effort to help individuals is sheer nonsense.

Whinfield (1975) also admonishes that vocational educators can no longer be isolationists either in society or in the education community. They must get into the mainstream of education. The community expertise already directed at the special groups defined in vocational legislation must be utilized by vocational educators. Most states have a fairly sophisticated educational program for the deaf, blind, and physically handicapped. Coordination and cooperation with experts in these and other programs are musts. Again, the need for coordination is not limited to the special needs area.

Legislation for vocational education has affected coordination and cooperation with public and private agencies, including business and industry. Burkett (1971) addresses legislative expectations and the need for new relationships. He calls for an integration of specialists from a wide variety of agencies, including mental and physical health, crime prevention and correction, welfare, education, municipal services, child care, recreation, and the numerous fields of public service to serve vocational education students better.

The 1976 Vocational Education Amendments (P.L. 94-482) require some of the coordination to which Burkett alludes. The planning process for the five-year state plan called for in Section 107 and the requirement of advisory councils at federal, state, and local levels convey the intent of Congress to see better coordination of vocational education with other programs serving our society that have an interest in vocational education and/or the student in vocational education.

Legislation notwithstanding, the need for articulation and coordination is somewhat self-evident. Articulation and coordination are central to the purposes of vocational education.

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EVALUATION

THE PRINCIPLE

Evaluation is a continuous process in vocational education.

EVALUATION DEFINED

Evaluation is a process of providing information as a rational basis for decision making. Decision making takes many forms and impinges on most aspects of vocational education, including planning, diagnosis of learner needs, funding, and a myriad of other elements. Decision making is not an annual event and should not wait for annual evaluation data. Evaluation data must be available on a recurring basis if decision making is to have a rational basis. Coster and Poplin (1978) describe evaluation as a process that enables a decision maker to ascertain the effects of a program or a plan of action, and thereby to make progressive adjustments in order to reach a goal more effectively. Progressive adjustments suggest that decision making and evaluation are an ongoing process.

A rational basis for decision making must include information in several areas. Stufflebeam (1968) has classified these decision-making areas as planning, programming, implementing, and recycling. In turn, each area for decision has a corresponding type of evaluative data. These are described by Stufflebeam as context, input, process, and product. Each type of evaluative data is available at a different phase of vocational education. To believe that evaluation is other than a continuous process is to be misled, and the result is decisions made with less than adequate information.

WHY EVALUATE?

A major purpose of evaluation is to effect improvement. Coster and Poplin (1978) see this purpose as they describe the need for a model evaluation system that both coordinates and relates the evaluation, review, revision, and accountability reporting efforts at the national, state, and local levels. The outcome sought is improvement in the efficiency and effectiveness of the delivery system for vocational education programs and services.

Improvement as a goal of evaluation is not always easily obtained. As Coster and Poplin (ibid.) point out, the need for a model evaluation system still exists. Earlier, Wallace's (1975) review of evaluation systems for vocational education led her to conclude that most evaluation methodologies are inadequate in providing input for planning and improvement. When appropriate

and adequate data are missing, decisions leading to improvement are hampered.

Improving the quality of vocational education implies planning—a decision to move from one quality level to a higher quality level. To achieve efficient movement, a plan must be developed and implemented. Together, evaluation and planning are indispensable to a sound program of vocational education. The model entitled "System for State Evaluation of Vocational Education" (Starr, Dieffenderfer, Archer, and Ernst 1970), developed by the Center for Vocational and Technical Education, has a major component labeled the "evaluation-program planning cycle." Further, the evaluation model was designed as a continually operative mechanism that allows program plans to be adjusted whenever required by changes in the field situation. This model illustrates the close relationship between planning and improvement. It also illustrates the need for evaluation to be continuous.

Evaluation serves as a tool for examining accountability in vocational education. Two major dimensions of accountability, carrying out assigned responsibilities and performing efficiently, are determined through evaluation. Public credibility requires demonstrable proof of the assertions about the value of education. Vocational programs should be able to demonstrate clearly that they are providing valid, work-related education in occupations where jobs exist, and that this education is provided on an optimally effective and efficient basis (Wenrich and Wenrich 1974).

Accountability itself must be evaluated in proper perspective. Certainly, vocational educators need to be worthy of public confidence and trust, and vocational education programs need to operate efficiently in seeking valid goals. However, recognition that vocational education does not exist outside of the social system and education is important to the evaluation process. For too long, vocational education has been expected to be accountable for performance that requires the support of other elements in the educational system. Frequently these elements are outside the control of vocational educators. If evaluation is used for accountability, it has to take place in the proper context.

Vocational education must maintain pace with contemporary society. Through change and improvement, vocational education will more adequately serve the needs of both individual learners and society. Effective decision making is selecting from appropriate alternatives and is pivotal to change and improvement. However, appropriate alternatives and decision making must be based on data from continuous evaluation of vocational education.

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FOLLOW-UP

THE PRINCIPLE

Follow-up is a vital extension of vocational education.

A COMMITMENT UNFILLED

Follow-up is frequently viewed by vocational education as a compliance function that provides data for local, state, and federal reporting. Haphazard procedures and lackadaisical interests have been evident in the nature of data sought and the completeness of data obtained.

Follow-up has not been a specific requirement of federal legislation for vocational education. Requirements for evaluation in the 1976 Vocational Education Amendments (P.L. 94-482) do imply that follow-up is to be a part of the total evaluation process required by that law. Future legislation for vocational education, if it follows earlier patterns of first encouraging and then later mandating, is likely to mandate follow-up procedures.

Requiring follow-up will not ensure improvement in its use. First, vocational educators need to understand the importance of follow-up to the student and to vocational education. Further, there must be a commitment to participate fully in vocational student follow-up activities.

FOCUS ON STUDENTS

Follow-up questionnaires ask a wide diversity of questions. Did you seek full-time employment? How many full-time jobs have you held? What was your beginning hourly wage? Are you presently working? A list compiled by Franchak and Spirer (1978) goes on through thirty-two items. The questions asked require personal data, information about learner purposes, and evaluative responses and statements.

The focus on the needs of former students of vocational education gets lost in many follow-up programs. Questions tend to be about "what has happened" and not about "where do you want to go." Franchak and Spirer's handbook attends to information regarding former students' needs.

The individual should be central to the purposes of follow-up in vocational education. Determining the respondent's interest in getting more vocational and/or general education ought to be a part of all student follow-up instrumentation.

Lifelong learning is promoted through vocational education. Making vocational education's role in lifelong learning obvious through the process of follow-up increases the potential that the individual will enroll in further

vocational education. Smith (1974) puts the issue in sharp perspective. He says that the proof of vocational education's success is better achieved through direct assistance to hundreds of thousands of persons who seek to acquire or improve their abilities to cope successfully in the world of work, than through the means of intermittent surveys that often mask program quality or reveal perfunctory information too late to be useful or too veiled to be interpreted.

PROGRAM IMPROVEMENT

Follow-up, like evaluation, can help identify areas for program improvement. Smith (1974) points out that follow-up explores job performance strengths and weaknesses of the former students and serves as a means to obtain authentic information from employers regarding what contribution prior training makes in helping employees meet the demands of business/industry. Both student and employer data have implications for program improvement needs.

Student follow-up does not end with the processing and tabulation of data. Comparing the data against original program objectives and developing implications for program modification or change are a part of follow up. Many follow-up programs stop short of these activities and fail to utilize fully the data collected. Smith (ibid.) holds that the crucial evaluative test of follow-up is no less than a regular documentation of program modifications that have been stimulated by follow-up data.

CUSTOMER FOLLOW-UP

Another type of follow-up, customer follow-up, has application in vocational education. The private sector of the economy regularly provides customers with the opportunity to give feedback regarding services and product quality. Smith (ibid.), in addressing the idea of customer feedback, points to the universal effort in the private sector, an effort that is not clouded by purposes other than to test the performance of the product or service. The results receive in-house treatment and are not published for the purpose of public acclaim. These results stimulate modifications, a fact that is attested to by the countless changes in commercial products and services that characterize the domestic and international economy. Vocational educators could gain immediate feedback by emulating the private sector in this type of follow-up.

PRINCIPLES AND PROCESSES

Responsibility to the learner demands follow-up in vocational education. The potential impact of a thorough follow-up program, through its demonstration of a concern for learners, the dimension it adds to accountability, and lines of communication it maintains in the community, all point to the vital nature of follow-up as an extension of vocational education's activity.

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LEGISLATION

THE PRINCIPLE

Federal legislation for vocational education is a reflection of national priorities.

WHERE IT ALL BEGAN

Federal involvement in public education has a short history. Some see the Morrill Act of 1862 as a beginning point of federal concern in public education. Others see the Smith-Hughes Act of 1917 as the beginning point. Together, these two acts do represent federal action that affected public education: the Morrill Act at the collegiate level, and the Smith-Hughes Act at the secondary level.

Carroll S. Page, a U.S. senator from Vermont, was prominent among the early federal supporters of vocational education. Page and the author of the Morrill Act, Justin S. Morrill, were both Vermont senators. According to Barlow (1976b), Page was personally acquainted with Morrill and admired the great humanitarian legislation concerning agricultural and mechanical (A & M) colleges. Page would later tell the U.S. Senate that the Morrill Act had been the beginning of preparations necessary for providing vocational education to the American public. Page felt keenly that the actual preparation for the majority of farm, shop, and home tasks should begin in the high school. It was obvious that the A & M colleges were not meeting that goal.

Page's concern for vocational education was evident. In speaking to the Senate on 5 June 1912, Page presented his views on the importance of vocational education and of Senate Bill 3, which he had introduced earlier. Page emphasized the importance of vocational education in the welfare and future of the United States. A small portion of Page's remarks follows:

> Mr. President, this is a great public question; a question which affects the welfare not only of our boys and girls but of the mature vocational workers, including the homemakers of the United States, as has no other which has been before Congress for more than half a century; a question which is engaging the best thoughts of eminent publicists and educators from one end of the country to the other—indeed, throughout the civilized world. It is a question which the American people have come to believe directly affects the economic conditions of the country in a

> degree little, if any, less than the largest of our large economic problems. It is a question which will, in my judgment, settle in great measure the quality of our citizenship in the generation upon which we are now entering. It is a question which will profoundly affect the cost of our food supply as well as the amount which our workers may earn with which to meet that higher cost of living which is upon us. It is a question which involves appropriations from the National Treasury aggregating nearly $15,000,000 annually. On a problem of this magnitude I believe Senators should not be heard to say that they are too busy with their other duties to give the matter proper consideration (1912, p. 3).

Page's extensive involvement in promoting vocational education is well documented by Barlow (1976b) in *The Unconquerable Senator Page*. Barlow's book also provides an excellent background for examining the roles of various groups and individuals in the activities that led to eventual passage of the Smith-Hughes Act.

Page was unsuccessful in getting congressional action on his proposed legislation. Page's struggles to get federal legislation for vocational education did, however, keep the issue before Congress.

Congress dealt with questions on vocational education legislation for over two years without laws being passed. Conflicts and various interests eventually led to compromise action. The Commission on National Aid to Vocational Education was created by an act of Congress on 20 January 1914, authorizing the president of the United States to appoint a commission of nine members to consider the subject of national aid for vocational education and to report their findings and recommendations no later than 1 June 1914.

The Commission organized on 2 April 1914. The nine members included U.S. Senators Page and Hoke Smith; U.S. Representatives D. M. Hughes (Georgia) and S. D. Fess (Ohio); and five noncongressional persons: John A. Lapp, Florence M. Marshall, Agnes Nestor, Charles A. Prosser, and Charles H. Winslow. The short time available made necessary continuous sessions of the full commission practically every morning, as well as the organization of a subcommittee of the five noncongressional members, who came to Washington from their duties elsewhere to give their entire time to the commission's work. The subcommittee was in session nearly every afternoon, and frequently at night. Congressional members of the commission attended these afternoon sessions as their duties permitted (Commission on National Aid to Vocational Education 1914).

FEDERAL VERSUS STATE RESPONSIBILITY

The commission reflected a sensitivity to the issue of federal versus state responsibility for education. Questions developed by the commission and submitted to various governmental departments, individuals, and national organizations evidence awareness to the federal-state issue.

Questions about grants to the states for vocational education occupied the largest part of the time and attention of the commission. In this area, the commission reported that national grants were needed for the salaries and the training of vocational teachers in order to (1) help solve a problem too large to be worked out extensively and permanently except by the nation; (2) help the states having varying resources to carry the cost of providing vocational education and thereby make this education possible in states and localities already burdened with meeting the requirements of general education; (3) equalize among the states the large and unequal task of preparing workers who tend to move from state to state, thus making training for work a national as well as a state duty; and (4) give interest and prestige in the states to the work of preparing youth for useful and productive service (ibid.).

Several guiding principles were recognized by the commission as conditions under which grants for vocational education should be given. These principles, like the findings reported above, emphasize states' rights, the national character of the problem, and the need for cooperative effort to solve the problem. Of the thirteen principles given, three illustrate this general nature:

> The federal government has no authority to control or manage the internal affairs of the states, nor can it take part in controlling or managing their educational systems.
>
> The development of vocational education at the present time is a matter of urgent concern to the nation as well as to the states, and each owes a duty in its development in the interest of the general welfare.
>
> Appropriations out of the federal treasury of the money of the whole nation should be accompanied by such a reasonable voice or participation by the national government in cooperation with the states as will ensure the proper expenditure of the money for the definite purposes of the grant and such as will ensure a minimum of efficiency (ibid., pp. 70-71).

PRINCIPLES AND A PHILOSOPHY FOR VOCATIONAL EDUCATION

Early rationales for federal involvement in vocational education have merit for today. The development of human resources for productive citizenship is a national concern that affects the nation's economy; mobility and changing technology create a need for workers that is not specific to one state or locality; preparation for work in the public schools lacks prestige (although some positive changes are occurring here); and equalization and sharing of resources has been adopted as practice by state governments.

The national wisdom represented by the federal government transcends that of individual states. There exists at the federal level an insight into the needs of the nation's people that is greater than that held by the states on an individual basis. It is this national wisdom that has moved our nation toward desegregation, equal rights, and reduction of poverty. It is this same wisdom that has introduced research, cooperative education, the needs of the disadvantaged and handicapped, sex equity, leadership development, and curriculum development as points of emphasis in more recent federal legislation for vocational education.

Federal legislation for vocational education represents an expression of national priorities—a reflection of the nation's wisdom. This expression of priorities was as evident in the Smith-Hughes Act as it is in the 1976 Vocational Educational Amendments (P.L. 94-482). The Smith-Hughes Act did not provide for programs of business or commercial education; however, the Commission on National Aid to Vocational Education studied the need for such programs. The questions submitted to some governmental departments and to individuals and to national organizations by the commission were structured to request data about commercial education, together with agriculture, industrial, and home economics (ibid.). The report of the commission leads one to conclude that commercial education was not a priority in 1914.

Recent federal legislation has reflected, in some cases, new priorities. The 1976 Vocational Education Amendments include a change of emphasis from maintaining, extending, and improving existing programs to extending, improving, and—where necessary—maintaining existing programs. There have been changes in eligibility for federal assistance, from specific program areas to all areas of vocational education. Categorical funding has been provided for specific priority areas. Block funding has replaced portions of earlier categorical designations. These changes are not inclusive of all changes that have occurred in the last two decades, but they do illustrate the range of national priorities in vocational education. These changes, based on the national wisdom, represent current concerns related to vocational education.

As with most public enterprises, there are critics of current priorities in vocational education. However, not all of the critics would do away with federal involvement in vocational education. According to a report of the Carnegie Council on Policy Studies in Higher Education (1979). "The chief problem with the effort to maintain funding for vocational education at both the federal and state levels is that too much of the money goes to preserve the status quo" (p. 140). The criticism of the Carnegie Commission may be well founded; however, the wording of the purposes of P.L. 94-482 leaves the impression that it does not intend to maintain the status quo. The opposite seems to be true.

Federal funding serves as a *stimulus* to vocational education. This concept was advanced in the commission's (1914) report and in the statement of purposes in the Smith-Hughes Act. Stimulating and promoting quality education through the use of federal resources continues as a reason behind legislation for vocational education. When the federal contribution is less than 15 percent of all expenditures for vocational education, it is difficult to claim that the federal dollar *controls* vocational education.

National priorities are a justification for federal involvement in vocational education, and congressional action becomes a statement of national wisdom. Vocational educators need to be sensitive to and participate in the process that results in an expression of the nation's concern. Accepting federal dollars signifies acceptance of the nation's concerns, wisdom, and priorities for vocational education.

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PLANNING

THE PRINCIPLE

Comprehensive planning is stressed in vocational education.

SETTING DIRECTIONS

Planning was implicit in early congressional action related to vocational education. Senator Carroll S. Page of Vermont, by U.S. Senate resolution, constituted a subcommittee of one to correspond with leading educators and others interested in vocational education (Page 1912). Further, a congressional resolution authorizing the president to appoint a Commission on National Aid to Vocational Education was evidence of how the U.S. Congress looked ahead and planned for vocational education.

The commission's extensive activities reflected careful attempts at planning. The short time line given the commission (the commission organized on 2 April 1914 with an obligation to report by 1 June 1914 did not prevent it from holding extensive hearings and collecting data to support the need for vocational education and the concomitant need for federal support.

Creation of the National Society for the Promotion of Industrial Education (NSPIE) was a projection of the future for vocational education. NSPIE was the premier organization involved in planning and conducting activities that greatly influenced passage of the Smith-Hughes Act.

The early planning for vocational education resulted in substantial support for vocational education. At the same time, there was important documentation of needs related to vocational education. Based on these deliberations, the commission (Commission on National Aid to Vocational Education 1914) recommended to Congress a bill that would provide grants for cooperating with the states in promoting vocational education. Eventually, legislation was passed that largely reflected the recommendations of the commission.

A sidelight to the planning activities involves home economics. The commission focused on the need for teachers of vocational education and included a recommendation for funding the training of teachers of home economics, together with agriculture and trades and industry. However, the commission's proposed legislation did not include grants for salaries of teachers of home economics. Rather, it only recommended equal amounts for teachers, supervisors, and directors of agriculture and teachers of trade and industrial subjects (ibid.).

Training for the home was viewed as a necessary part of a girl's general preparation. Such training, according to the commission, should be given

throughout the entire school course. Because of unique problems in providing home training in rural areas, the commission recommended that grants for agricultural education include the work of the farm and farm home. It was the commission's position that the numerous callings of women that had home economics as a base should be included under the definition of industrial education. Home economics was added as a part of the grants for teachers of trade and industrial subjects, after the commission's proposed legislation was reported to Congress.

Plans for vocational education were required by the Smith-Hughes Act of 1917. The act reads, in part, as follows:

> That in order to secure the benefits of the appropriation for any purpose specified in this Act, the state board shall prepare plans showing the kinds of vocational education for which it is proposed that the appropriation shall be used; the kinds of schools and equipment; courses of study; methods of instruction; qualification of teachers; and, in the case of agricultural subjects, the qualification of supervisors or directors; plans for the training of teachers; and, in the case of agricultural subjects, plans for the supervision of agricultural education, as provided for in section 10. Such plans shall be submitted by the state board to the federal board for vocational education, and if the federal board finds the same to be in conformity with the provisions and purposes of this Act, the same shall be approved (P.L. 64-347, Section 8).

The state planning documents required by the Smith-Hughes Act and its subsequent amendments largely became shelf documents that represented procedures more than plans for the future.

A COMPREHENSIVE VIEW

Federal legislation has continued to set the tone for planning in vocational education. The 1968 Amendments to the Vocational Education Act of 1963 required states to develop annual and long-range plans. The long-range plan could be for a three-to-five-year period and was to be updated annually. The Vocational Education Amendments of 1976 further modified this requirement by specifying an annual plan and a five-year plan. The five-year plan was a one-time document that would be followed by another five-year plan.

Content and procedural changes are also evident in the successive legislation. Emphasis on needs, responsiveness to needs, and measurement of outcomes relative to those needs has increased. Involvement of ancillary and participatory groups, together with state agencies and commissions that have an interest in vocational education, has been mandated. Public hearings and responses to views presented at public hearings are also required in the development of the state plan. Thus, state planning requirements have moved from producing a compliance document to implementing a process with all the ingredients for comprehensive planning.

Several important reasons support the need for comprehensive planning in vocational education. Copa (1977) views planning from an economic perspective. He believes that planning is done to improve efficiency and to avoid surpluses or shortages in production. He also points out that a plan sets production goals for the future and that such a plan may be used as a basis for comparison in monitoring progress toward the goals. Planning (even economic planning) for vocational education should keep human and societal needs clearly in view.

Planning is a future-oriented activity. Lamar, Gyuro, Burkett, and Gray (1978) say that "comprehensive planning is the process of forecasting the future and then preparing for it" (p. 13). Being future-oriented, there are a number of reasons for an emphasis on planning, such as (1) limited resources; (2) increased demands to improve existing programs and develop new programs; (3) strong competitors for resources available to satisfy various vocational education purposes; (4) demands for increased involvement in the decision-making process; (5) pressures to decentralize decision making, both at the policymaking and administrative levels; and (6) increased demands for accountability regarding programs and services are among these reasons (ibid., pp. 14-15). It is these competing elements that encourage comprehensive planning. In order to maximize the utilization of available resources, decision makers must select carefully among the competing alternatives. In making the selection, the relative social desirability of various ends, as well as the relative efficiency of different means to those ends, must be determined and considered (Moss and Pucel 1978).

Responsiveness is a mark of quality planning. Vocational education, as a part of society's plan for maintaining continuity, should respond to and reflect the needs of the community it serves. Failure to be responsive implies that vocational education is not designed for the benefit of society but rather for its managers and operators. Thus, one purpose of planning is to ensure that vocational education remains responsive to individual and societal needs and that it maximizes the return on society's investment. Good planning should yield improved vocational education programs, services, and activities.

Decision making is critical to the process of planning. Planning, as pointed out earlier, is future-oriented. To direct programmatic effort toward the future necessitates making decisions about the nature of the future and decisions about responses to the future seen. Copa (1977) believes that a plan may be conceived as a definition of how one is going to get somewhere or obtain something in the future. Usually, a plan is characterized in terms of time, cost, and performance expectations. Lamar et al. (1978) add that planning, as an administrative function that supports leadership in the decision-making process, needs to be well understood by vocational educators. Planning should be goal-oriented and organized to search constantly for information that will assist decision makers in the problem-solving process.

Planning also bears a close relationship to policymaking. In fact, planning is intended to support the activities of policymakers and administrators as they attempt to make program decisions. Effective planning must be closely related to policymaking and implementation. Planning, then, is a means to an end and should be sustained as a continuous process that gives constant attention to anticipating the actual changes and the need for redirection, renewal, or revitalization of programs and services.

Arnold and McNamara (1971) share this point of view. They say that educational planning is a *process* of preparing information in the form of a set of alternatives (with estimates of their specific consequences) to aid decision making for management policy formation and administrative action. Such purposes represent a significant departure from the "traditional" notion of planning, which tends to be viewed as a method for carrying out a predetermined design or master blueprint.

Educational planning has changed and is different from human resource planning. Arnold and McNamara (ibid.) claim that this distinction from human resource planning is extremely important in vocational education planning and centers on the relationship of education to economic and social development. Failure to make this distinction accounts for some of the disagreement among researchers and planners as to the objectives and goals of educational planning. This is especially true when educational researchers attempt to utilize the results of research studies published in the economic literature, and vice versa. The primary purpose of educational planning is to design educational policy. Studies in this area include such diverse topics as curriculum selection, design of physical facilities, resource allocation strategies, cost accounting, salary schedule analysis, and student population projections.

Coordination must occur in comprehensive planning if it is to be effective. The planning process has evolved from stressing physical and economic development to a much broader role of social planning that emphasizes meeting the needs of people. Planning has taken on both comprehensive

and coordination dimensions. In fact, planning for vocational education involves at least three significant dimensions: intraprogram planning, vertical planning, and horizontal planning (Lamar et al. 1978). All three dimensions involve coordination: the first between and among programs; the second between and among federal to local jurisdictions; and the third across all facets and areas of responsibility at a given level. This includes involving individuals, agencies, and advisory groups that have a vested interest in the planning process as well as in the ultimate outcomes of vocational education.

External groups have taken on added importance to comprehensive planning in vocational education. However, there is a need for policies to be developed on how external groups should be involved in the planning process. Such policies should give external groups every opportunity to express their views and should require the related policymaking board to give its reasons for accepting or rejecting the recommendations received from such external groups.

Other policy needs will emerge as the planning process matures. Planners should always be alert to areas of concern in which new policies will need to be considered and adopted.

Staff responsible for vocational education also need to be involved in comprehensive planning. Dunham, Simmons, Whitten, Harris, and Gentry (1978) assert that professional vocational education staff are frequently criticized for their "turfmanship." This group, however, is essential to success in planning. It is important to recognize that professional vocational educators are found in a wide variety of occupations and at all levels—community, local school, regional, state, and national. They vary in attitudes, ability, competence, commitment, and experience. Of these, the local teachers are the most critical. Essential, too, is the involvement of the state level vocational education staff specialists, administrators, supervisors, coordinators, and consultants.

Planning is too important to leave to the professional planner alone! Yet, the professional staff member is still the most important person in the planning process. Without the professional planner, the whole process, in spite of its openness, involvement of new groups, and willing outsiders, stands little chance of being translated into an effective program of vocational education.

Planning is an ongoing process. Just as organizations that plan evolve, so does planning, building upon what is known, while providing a mechanism for incorporating what becomes known.

PRINCIPLES AND A PHILOSOPHY FOR VOCATIONAL EDUCATION

Changing internal and external factors will continue to influence any plan or planning process. It is important that, in spite of what changes occur, vocational education communicate to the public what it is and what it does. As Tuttle and Hopkins (1978) point out, planning offers a vehicle for vocational education to communicate to the general public the activities planned for it. Comprehensive planning must be stressed in vocational education.

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RESEARCH

THE PRINCIPLE

Research on a continuing basis is fundamental to the dynamics of vocational education.

A FEDERAL BOARD ROLE

Studies and investigations supporting vocational education were considered important by the Commission on National Aid to Vocational Education (1914). However, based on information presented at the Commission's hearings by six federal departments, it was found that such studies and investigations were hampered by a lack of adequate funding. The Commission concluded that one of the most valuable ways in which government could aid the states would be through national grants for studies, investigations, and reports to further the efforts of the states to place the work of their vocational schools on a scientific and business-like basis.

It was a recommendation of the Commission that appropriations be made to a federal board for making studies and investigations in vocational education. Such studies were to cover the subjects of agriculture and home economics, trades and industries, commerce and commercial processes, and methods of teaching and courses of study for these subjects. The areas recommended for study were broader than those recommended for funding. Although the Commission found that courses were adequate in some areas, research in sufficient quantity was lacking in all areas so as to justify an annual appropriation to the federal board to conduct needed studies and investigations.

Ongoing research in vocational education was a result of early federal action. The Panel of Consultants on Vocational Education (1963) note that research efforts in vocational education have long been recognized. They also point out that the efforts initiated in the Smith-Hughes Act have continued in subsequent acts and have made federal funds available for purposes of research in vocational education. Thus, research has been authorized and encouraged. The Panel believes that although much has been done. The results have not been commensurate with the needs.

MODERN RESEARCH PROGRAMS

The importance of research in the field of vocational education needs to be more widely recognized. In addition, steps need to be taken to develop research commensurate with needs. According to the Panel (ibid.), changing

technology, new scientific concepts, new materials, and changing occupations are factors creating an expanded need for research. The Panel's position is that if vocational education programs are to provide adequately for the needs in the states and the nation, and if specific programs are to be effective, much more information is needed than has been available. Research on a broad scale, from specific studies of detailed problems to nationwide studies of problems involving the whole country, are needed to provide the needed information.

Research gained additional impetus with passage of the Vocational Education Act of 1963 (P.L. 88-210). The 10 percent setaside for research activities provided a major resource for stimulating research in vocational education. The amendments to P.L. 88-210 and more recent federal legislation for vocational education have sustained massive research activities. Since 1963, these studies have ranged from the local to national level and have included teacher-developed projects, state-funded research coordinating units in every state, and a National Center for Research in Vocational Education. They have produced research writings that exceed all of those generated in the first forty-five years of vocational education.

The array of examples in research is lengthy. For example, the identification of teacher and administrator competencies in vocational education has been extensive and productive. Studies on the effects of vocational education have also been numerous. Networks for distributing successful teacher-directed projects have aided many additional teachers, and range from new techniques in teaching skills to developing new curricular materials. The generation of new knowledge through research in vocational education is truly impressive.

The need for more research, however, continues, and the unmet research needs are varied and broad. Leighbody (1972) identified a number of such needs in the early 1970s, and many of those continue to deserve and are receiving the attention of researchers. These include program evaluation, education of the disadvantaged and handicapped, the sociology of occupations, various modes of instruction, curriculum patterns, governance, economic issues, and assessment of learning. Richardson and Moore (1979) also suggest many of these same areas for research attention.

Studying unmet needs is a beginning point for program improvement. According to Leighbody (1972), the potential for program improvement through research in vocational education is as great as in any other area of education—probably greater, because of the accumulated needs that have only now begun to be met. Many aspects of vocational education need to be examined critically through sound research to help validate current practices or stimulate needed change. Research of this kind must be a continuing process.

Vocational research—and its results—should lead to improvement in vocational education. Unless the outcomes of research and their utilization are put to work for greater student success, research efforts are only exercises of questionable priority (Brandon 1971).

The learner, then, is the ultimate target of research. Teachers need to become aware of research findings and knowledgeable about how to use them. Richardson and Moore (1971) indicate that vocational education research has affected the profession favorably; yet, it appears that an even greater impact could be made by improving the dissemination of research to vocational teachers. Too often, vocational education researchers communicate primarily among themselves, and the results of research go unused. One way to increase the utilization of research and development by classroom teachers is to write reports directly for teachers. However, information alone is not the answer.

Vocational educators must be trained to apply research findings. This statement implies a willingness by vocational educators to use research findings; it may be that some still need to be convinced of the importance of utilizing research. Regardless of where individual vocational educators are today, vocational teachers of the future will need to relate to research in at least two important ways. First, they must become knowledgeable consumers of research and, at times, become participants in research. As research consumers, they must know how to keep informed of research that is being done and capable of reviewing it critically so that they can judge its quality and relevance to their own needs. And, second, there is a need for practitioners to look upon research as a continuing and indispensible resource for improving programs.

Research is ultimately a means to new understandings. As Swanson (1971) observes, the object of research is to generate new knowledge, and the research may take many forms. It may result from a collection of empirical data. It may describe the outlines of a new theory or shatter the foundations of an old one. It may be simple or sophisticated. The most significant feature of good research is the relationship of its hypotheses to outcomes at the time the research is begun. That relationship, very simply, must be that the outcomes *are not known*. Additionally, an important characteristic of research is that negative results are tolerable.

In keeping with Swanson's position, the very foundational beliefs of vocational education—the principles that we accept as truth—must be open to research. Few of the time-honored beliefs and practices with which vocational education has evolved have been tested through research. These beliefs have largely been assumed, and the assumptions have gradually taken on the character of wisdom and truth, to be adopted as policy through legislation. At that point they are no longer subject to question. The fact

that they are no longer subject to question, however, does not mean that they should not be questioned. This situation needs to be changed. Truly, research on a continuing basis is fundamental to the dynamics and ultimate success of vocational education.

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CHAPTER 6
PHILOSOPHICAL CONCEPTS IN EDUCATION

EDUCATIONAL PHILOSOPHY—A LAYPERSON'S VIEW

Philosophy and theory bear a close relationship to one another. *Philosophy* represents a statement of the basic presuppositions upon which one's view of certain phenomena is based. *Theory*, on the other hand, grows out of evidence that is used to construct a paradigm to explain the relationships among ideas, objects, or phenomena. As Morris (1961) declares, "Every important human activity can be shown to have a basis in theory, a centralizing idea of what it is all about, what it is trying to do, and how it operates in human experience" (p. 7). In a similar manner, philosophy is a set of assumptions used in viewing the world. Having a *weltanschauung*, or way of viewing the world, allows us to describe how that world operates in human experience.

A theory accounting for various phenomena occurring in the educational enterprise is much like a philosophy of education. Yet, it is not a philosophy. If the theory-building process encompasses, integrates, synthesizes, and explains the entirety of our educational endeavors while making clear the assumptions upon which it rests, it becomes, in essence, a philosophy. Educators who choose to build with a philosophical foundation, derive a single theory—a philosophy of education—by which the activities surrounding human learning and the activities of education may be projected, explained, and managed. Philosophy becomes the master plan and the foundation for solving problems, answering critics, and guiding rational behavior. According to Morris:

> It is in this sense that a theory is, as they say, the most practical thing a man [sic] can have. A teacher who teaches by impulse, like an aviator who flies "by the seat of his pants," may conceivably teach well, but when unexpected situations arise, his actions are likely to be flustered and

> thin. With a well-thought-out theory or philosophy of education an individual knows what he is doing and why. And it is when our practical conduct becomes more and more rational, i.e., increasingly subject to critical theory, that we say it becomes more and more professional in character. The truly professional teacher is the individual who tempers and redirects native impulse with the rational theory of his craft (ibid. p. 8).

A philosophy of education goes beyond theory building. Philosophy encourages the alignment of theory and practice. And, practice based on philosophy represents a level of coherence that is not likely to be evident when "flying by the seat of one's pants." Although these claims for philosophy are high sounding, they understate rather than overstate the rightful contributions of philosophy in education. After all, there is no other endeavor that seeks, to the same magnitude, to pose questions whose answers ultimately point the direction for the practice of education.

Put quite simply, philosophy asks three fundamental questions: What is real? What is true? What is good? Each question's apparent lack of complexity is in sharp contrast to its importance and to the historic struggle of philosophers to evolve a point of view. To ask, "What is real?" may appear nonsensical. Similarly, asking "What is true?" or "What is good?" may appear to be foolish and naive, but the student of philosophy knows that such questions are not nonsensical, foolish, or naive. Each question of philosophy is one part of a whole that is greater than the sum of its parts.

The study of reality is formally known as *ontology*. Ontology centers on the question of what exists and, equally important, what it means to be. *Epistemology*, the study of truth, focuses on how we know things and knowledge itself. The issue of good is viewed in two parts, ethics and aesthetics. Respectively, these issues are taken to deal with right conduct and beauty. Together, questions of goodness are grouped under the term *axiology*. Ontology, epistemology, and axiology are the main business of philosophy. This trio comprises the substance of philosophy that commands the philosopher's attention and assists in the search for understanding the human condition.

Competing systems of thought have developed over the ages, from first recorded history to the past (if not the current) century. Each system has its own claim to importance and challenges the individual to embrace it as "the way" to understanding the meaning of being and the path to the "good life."

Obviously, each system carries with it varying implications. The selection of a system of philosophical thought is of profound importance to the educator. In the final analysis, it is the educator's system of philosophy that

determines what the educator will do in seeking directions for good, for students, and for living. For the system of philosophy to be meaningful, educators must be able to place trust and confidence in the directions it suggests, and it must have relevance in dealing with educators' day-to-day concerns.

Philosophy has nearly unending points of application to education. The questions of education that may be appropriately asked of the philosopher may be very broad or very specific. Such questions may be about grading practices, seating arrangements, curricula, discipline, extracurricular activities, scheduling, dress codes, graduation requirements, and more. Educational philosophers do not generally have pat answers to such questions, although some educators and would-be educators claim to have such answers. But philosophers can, by asking the right questions, assist educators to see alternatives and, more importantly, to seek coherence in a point of view. Specific questions ultimately lead to broader issues, which in turn mirror the three fundamental questions of philosophy.

It is also possible to translate the three fundamental questions of philosophy into broad questions about education. Questions evolving from this latter procedure may be useful in examining the practices of educators. The assumption is that the practices of education—vocational education, in this case—reflect and speak to broad philosophical questions. (This is the "inside out" procedure discussed in chapter 1.)

What, then, are the broad educational questions that can be derived from the three basic questions of philosophy? Ontology, dealing with existence and what it means to be, may be put into an educational context by asking, "What is the nature of the learner?" and "What is the role of the teacher?" Epistemology evolves into asking, "How do you determine what is to be taught as truth?" Axiology may be represented by asking, "What is the purpose of schooling?"

These four questions about education, "What is the nature of the learner?" "What is the role of the teacher?" "How do you determine what is to be taught as truth?" and "What is the purpose of schooling?" are not the only broad questions in determining a philosophical position. Yet, answers to these four questions may be analyzed for coherence in their point of view and used to infer directions and possible responses to other questions posed about education.

Each of the competing systems of educational philosophy has a distinct response to fundamental questions concerning education. (These responses are discussed later in this chapter.) Understanding how each system typically responds to the basic questions is useful in grasping how philosophy applies to educational practice. Understanding the competing views also aids in doing an analysis of various educational practices and then through inductive reasoning to determine a philosophical position.

The labels that may be applied to the competing views are varied, both in philosophy and educational philosophy. One set of descriptions or labels having wide acceptance has been used by Morris (1961). He classifies five major competing systems of philosophy as Idealism, Realism, Neo-Thomism, Experimentalism, and Existentialism. Corresponding educational positions are labeled Essentialism, Perennialism, Progressivism, and Existentialism. The match-up between the philosophical system and its corresponding educational position is shown in table 1.

TABLE 1

PHILOSOPHICAL SYSTEMS AND THEIR CORRESPONDING EDUCATIONAL PHILOSOPHIES

PHILOSOPHICAL SYSTEM	EDUCATIONAL PHILOSOPHY
Idealism Realism	Essentialism
Neo-Thomism	Perennialism
Experimentalism	Progressivism[a]
Existentialism	Existentialism

[a]Pragmatism is substituted for progressivism throughout the book. The preference is based on negative connotations some educators and the public have about progressivism. Either term may be used without distorting the position represented.

Identifying with a single set of competing views is not the only alternative in establishing a philosophical position. It is reasonable to view bits and pieces of the several systems as suitable components of a philosophy. The result is described as an *eclectic* position. Eclecticism, however, is not the road to tranquillity.

The person who selects the eclectic approach in philosophy is following a process potentially filled with conflict. As one chooses a position statement from one philosophical system and another from a second system and still another from a third system, the major responsibility is to gather the pieces and views into a coherent whole. Developing coherence and harmonizing the position statements selected from contrasting (and sometimes conflicting) points of view is not easy, and rigorous and ongoing self-examination of the eclectic's positions is likely to reveal flaws and inconsistencies. These flaws and inconsistencies are certain to continue plaguing the eclectic in attempting to work toward a compatible whole. And if a compatible whole does emerge, it is very likely to resemble one of the identified systems. After all, philosophers have struggled for centuries to develop cohesive systems of philosophical thought.

The eclectic, to remain an eclectic, may eventually have to settle for discord and inconsistency. Discord and inconsistency may be acceptable to the eclectic, however, in preference to being "forced" to accept a position that is out of tune with long-held values. Individuals frequently find it easier to accept the eclectic nature of old values and beliefs than to examine those values and beliefs critically and restructure their thinking about the nature of being and the world so that they reflect coherence and unity. The decision to be eclectic, in the final analysis, must be made just as carefully as any other philosophical decision. As Brubakers (1962) points out, the decision to be eclectic is not a decision of convenience.

A philosophical position, whether eclectic or one of the established philosophical systems, is confronted with the same questions about reality, truth, and value. Educational philosophy also leads to a theory about knowing and a basis for practice. A personal philosophy of education provides a foundation for responding to questions about education, determining educational practice, and proposing educational policy.

A philosophy of education and a philosophy for vocational education—they may be the same thing with different titles—provide a theoretical framework for answering fundamental questions confronting educators. Four such questions were posed earlier in the chapter. Responses that represent three major systems of educational philosophy—essentialism, pragmatism, and existentialism—illustrate most of the philosophical views and applications active in education today. A complete elaboration of each of these philosophical systems is beyond the scope of this book, but the following discussions illustrate the basic positions and serve as a basis for comparison in relationship to the essential questions about education.

The three aforementioned systems of educational philosophy do not encompass all of the philosophical variations that have currency on today's educational scene. However, essentialism, pragmatism, and existentialism

represent root systems that together provide the basis for the most prevalent philosophical frameworks. Other educational philosophies generally represent variations and different points of emphasis of one of the three major systems.

An inductive development of a philosophical position is offered in chapter 7. The remainder of this chapter is devoted to developing an understanding of the fundamental assumptions of the three major systems of educational philosophy in order to develop a philosophy for vocational education using the inductive process.

VIEWING THE LEARNER

The relationship a person has with the world is an important philosophical issue. A discussion of the nature of the learner must then be related to the nature of reality. Understanding what it means for a person to exist—a metaphysical question—is drawn to notions about the nature of reality—the other part of the ontological question. For our purposes, it is not essential that these two, ontology and metaphysics, be treated as distinct fields of inquiry. The focus is on the person in the real or existential world.

THE ESSENTIALIST PHILOSOPHY

The *essentialist* combines the views of the idealist and the realist and arrives at a system of philosophy in education. The idealist may be better described as an *idea-ist*, as this approach views the reality of things and the highest quality of the person as ideas. That is, the perceptual world, important as it may be, is surpassed by idea. Hence, a person is a part of a world that, according to the idealist, has a dual nature—the apparent and the real.

The real world, according to the view of the idealist, is found in the mind. The ultimate ideas that are formulated in the mind are of a higher order than the reality perceived by the senses. It is the mind that is capable of transforming perceptual reality into ideas that are a more perfect form of reality and that have eternal qualities of permanence and absoluteness. The perfection of idea is found in its unchangeability.

The mind, obviously, is an attribute of the person. The education of a person as possesser of mind, according to the idealist, must emphasize the development of the mind. Building mental capacity is accomplished through symbols and ideas that represent the perceptual world. The emphasis on symbols, including language, mathematics, and those arts which convey the great ideas over time, is the mainstay of education, whose purpose is to develop the learner's mind. The learner is a mind to be expanded and developed through symbols and the world of ideas.

Realists, the other contributors to the philosophy of the educational essentialist, see the sensory qualities of the physical world as reality. The individual does not improve on reality by forming mental images or ideas of reality. Reality just is, and the individual is able to participate in reality by being an observer. Through careful observation and application of intelligence, individuals can come to a more complete understanding of the world. Reality exists on its own and it is not dependent on any individual's knowledge of it. Reality, to repeat, just is.

The reality of the world is characterized by a certain orderliness. There are natural laws that operate and govern the affairs of all that is. Persons are as subject to natural law as are other elements in the universe. The universe is an enormous machine, governed and operated by a set of laws fixed throughout time. It is against this backdrop that human knowing can occur.

The learner, in the realist view, is provided with a capacity to sense the real world. Observations, especially scientific observations, provide the basis for understanding reality. Developing the learner's ability to observe the laws of nature and using one's mental faculties to apply those laws to the affairs of people are in keeping with the learner's needs. Because reality is fixed, the learner, when properly trained, is able to provide correct responses to given stimuli. Literally, the learner is like a circuit board ready to be imprinted with circuits that make appropriate connections.

The idealist and realist philosophies together have dominated educational views throughout much of the history of education. Although the two systems of thinking appear somewhat antagonistic, they may also be thought of as complementary. That is, the two systems complement each other in providing for understanding the two worlds—the world of ideas and the world of things. Neither system denies the existence of the other. They simply have different emphases. One emphasizes the learner's need for ideational development, and the other emphasizes the learner's need to observe and apply natural law. The one provides the learner with the materials of the symbolic world; the other provides the learner with a demonstration of the regularity and orderliness of the systematic and predictable universe.

The essentialist's view of the learner may be summarized in two statements. First, the learner is a microcosmic mind that is capable of knowing the important ideas that do not change with time. Second, the learner is also a sensor of the physical world, able to master important facts about the universe—facts that are as unchangeable as the important ideas. These two statements may be an oversimplification of very complex ideas, yet they capture the essence of the essentialist's view of the nature of the learner.

THE PRAGMATIST PHILOSOPHY

The *pragmatist* is, in education, the equivalent of the philosophical experimentalist.* Experience is an important word in the ontology of the pragmatist. While the realist-essentialist claims that reality just is, the pragmatist avows that reality is what we usually experience in life. To the former, reality is a *noun*, whereas to the latter reality is *verb-like*. The ultimate expression of the pragmatist's position is to reject all notions that reality is transempirical (or beyond ordinary experience) and to claim that reality consists of and is limited to the experience of people in this world.

The world, being verb-like, is not fixed or set in time and space. The world is vibrant, in process, and becoming. Because the world is in process, the pragmatist claims that it is meaningless to speculate about the ultimate nature of reality. After all, there is no absolute reality. Reality is what we usually experience in ordinary life and, as time passes, the reality of tomorrow will become different from the reality of today.

What is the nature of the learner in a universe where experience is the ultimate reality? The learner is a transactional being, one who transacts business with the world. Transaction is process, and process to the pragmatist is experience. The learner is subject to change just as is the world. Each transactional event causes the learner to change dimensions in some fashion—a reconstruction of experience. To define forever that the learner is this or that or something else is to deny the very nature of being, according to the experimentalist. Being is becoming.

THE EXISTENTIALIST PHILOSOPHY

The *existentialist* represents one of the more recent philosophical groups to emerge in Western thought. The comparative recency of existentialism may account for its low level of influence on contemporary education. The newness of existentialism may also be a factor in the educational communities' lack of understanding of the position of the existentialist, especially as to how that position appears if put into educational practice. Contrasting with this lack of understanding is the appeal of existentialism, with its emphasis on the primacy of existence. Despite the apparent lack of understanding about existentialism, and perhaps because of its appeal as an individualistic philosophy, numerous practitioners claim to be existentialists.

*On occasion, the term "pragmatist" is used interchangeably to refer to the educational progressivist. Some may argue the accuracy of interchanging these terms, but the differences are not pronounced enough to warrant a lengthy discussion. In examining the pragmatist educational philosophy, pragmatist or pragmatism is used as a generic term.

The comparative immaturity of existentialism and the variety of opinions held by its proponents create confusion about existentialism. Some philosophical authorities do not even consider existentialism a true system of philosophical thought. They argue that the emphasis of existentialism on subjectivity and its lack of a system of logically constructed thought and rationality detract from its coherency as a system of philosophy. Furthermore, according to some critics, existentialism lacks a systematic approach to the fundamental issues of philosophy while being highly subjective and is thus full of inconsistencies and contradictions. The existentialists rebut the critics by asserting that human existence is too complex to yield to any systematic description and that real meaning is only found in the existence of the individual.

The existentialist places primacy on the person as existing. Initially, the person exists without a recognition of selfhood. Existence precedes essence. The person, however, is not definable in terms of others or in terms of predetermined notions except in that the freedom to choose and become whatever is chosen exists as the right of the individual. The individual declares the nature of his or her personal reality through the cognition, "I am." Once the individual comes to the awareness of self, the individual may then declare the further nature of reality. Reality awaits the affirmation of the individual being, and the reality acknowledged by one person is not necessarily the same reality determined by another being. Each individual is free to choose and, in effect, to create reality. It is, according to the existentialist, because first "I am" that all other reality must be specified by the person; "I am" comes before other forms of reality.

The learner is the central figure in determining the reality of what is. Because reality grows outward from the individual and an understanding of self, the individual's awareness and conception of self is a need of the highest level. The learner is viewed as having a capacity to accept the freedom to choose, to understand the meaning of choice, and to accept the anguish that comes from both. As the learner comes to selfhood, the anguish of choosing remains; alternate futures must be sorted out and the ultimate nature of the learner's reality decided. Harm may result if a prior design or set of conceptions is foisted off on the learner. In short, the learner is a chooser who develops a personal identity in and through conceptualization of the world.

THE TEACHER'S ROLE

The educational enterprise's single most important representative is the teacher. The teacher is the primary actor who determines the extent and the kind of philosophical framework that operates in a given situation. Eclecticism, essentialism, pragmatism, or existentialism have little meaning in the

classroom until the teacher understands, accepts, and implements the implications of one philosophical system or another.

Each philosophical system prescribes a role or set of functions for the teacher. The view of the learner held by a given philosophical system has clear implications for the teaching function. To ignore such implications is to invite serious discrepancy between what is professed and what is practiced. The philosophical system's view of the teacher's role, then, is a key in understanding how an educational program should operate within an identified theoretical framework.

THE ESSENTIALIST TEACHER

The essentialist teacher represents the qualities of philosophical idealism and realism. The task of the teacher is to bring together the world of idea and the world that exists beyond the classroom. The world of idea is itself represented by the teacher. Teachers, after all, are exposed to an idea world as they prepare for their roles. Teachers, especially at the university level, epitomize the development of the mind and the absorption of great ideas. These characteristics are generally an outcome for those who prepare to teach the language arts and social studies, especially literature and history. As possessors of the greatest ideas of time, they are most capable of sharing those ideas with learners; this sharing of ideas and development of a world of idea in the learner's mind comprise a primary task for the teacher.

Teachers with specialities in the subject matter of the perceptual world, science and mathematics, represent another aspect of the essentialistic ideal. These teachers are experts in understanding the physical world, its regularity, and its universal laws. These teachers developed the capacity to share with the students, through precise demonstrations and controlled activity, the exactness of the physical world. Helping the students master the laws and specific facts of that world is of primary importance in fulfilling the teacher's role.

Realist influences are also evident in some forms of pedagogy preferred by the essentialist teacher. The precise and definitive subject matter emphasized by the realist side of the essentialist's curriculum also results in precise and definitive methodology. Development of particular skills leads itself to drill, repetitive practice, conditioning, and formation of desirable habits. Of these, the area of conditioning stands as the best representation of skill development padagogy. Behaviorism and "stimulus-response" learning reflect the realist's intent to achieve precision in learning and to influence, in very specific ways, the subsequent behavior of the learner. In effect, given a specific situation or set of stimuli, the response of the learner is "built in" and thus known in advance.

Essentialist philosophy projects two major roles for teachers. One role is filled through the idea subjects of the language arts and social studies. Teachers of these subjects are responsible for endowing minds with the great ideas that have endured throughout time. In the other major role, the teachers of subject matter representing the physical world demonstrate the natural order of the universe and the importance of being a master of facts and information about the world. In both cases, idea and physical, the individual teacher is a model to be emulated by the learner.

THE PRAGMATIST TEACHER

The pragmatist teacher is very much like the learner. Each has a set of unique experiences, although the teacher's experiences are most likely to be more expansive than those of the learner. The pragmatist teacher, because of the unique nature of experience, is open to the possibility that the learner may have, in selected areas, an expertise greater than that of the teacher. The teacher, while engaged in the teaching role, is also experiencing and learning.

The teacher who embraces the pragmatist philosophy places faith in learning by doing, by experiencing. The objective is to provide the learner with experiences that involve the psychological, biological, and social aspects of each learner in order to relate learning to living and to provide for active interaction with the learner's environment. The approach of the pragmatist teacher may be described as teaching based on *the logic of the learner.* By contrast, in essentialism, subject matter that is taught for its factual nature and that is to be memorized and recalled on demand may be described as *the logic of the learned.*

Pragmatic teachers who implement the logic of the learner hold to a reconstruction of experience for learners. Learning is achieved by relating activity to past experiences, current interests, and practical applications in the here and now. Most frequently, this kind of learning is achieved through problem solving and use of techniques, especially the scientific method, that reveal the open-ended nature of our world. The teacher acts as a director of learning activities rather than as a dispenser of settled knowledge and established fact.

In the pragmatic perspective, learning is a lifelong activity. The continued encounters of the person with the world create opportunities for new experiences and a restructuring of comprehension. From this perspective, the pragmatist teacher assists the individual learner in acquiring the special experiences that are now most appropriate. The teacher also emphasizes the nature of change and the need for each person to maintain continuity in living by participating in and interacting with a changing world throughout

life. In all of this, the teacher participates as a fellow traveler and a lifelong learner.

THE EXISTENTIALIST TEACHER

The existentialist teacher is a person who has come to an awareness of selfhood and has declared, "I am." Having arrived at the existential moment, that person is in a position to help others find their own selves and thus become able to assign meaning to other elements of reality.

The existentialist teacher carries a burden of restraint in the learner-teacher relationship. It is not appropriate for the existential teacher to declare, "This is what reality consists of," or "This is truth," or "Here is what is of value." Rather, the teacher must provide encouragement to the learner in choosing meaning and sustaining a commitment and responsibility for the choice. Choosing values and determining the criteria for selecting values reside with the individual, and the teacher is committed to helping the learner develop this capacity and understand the nature of existential choice.

Existential choice must be based on an understanding of self together with an awareness of possibilities and consequences. The teacher is obligated to provide students with opportunities to see alternatives in reality, truth, and value, while declining to suggest that one alternative is more meritorious than another. Eventually, each person must choose that which has greatest meaning for self and must govern personal actions on the basis of individual choice. The teacher's goal is to assist the learner to find and understand self—a way of existing.

THE CURRICULUM AS TRUTH

Truth and the search for truth are the business of the schools, and it goes without saying that the schools deal in truth and methods of seeking truth. Certainly the schools do not knowingly teach nontruth. However, when one considers the variety of ways by which people assume that truth can be known and whether or not it is spelled *Truth* or *truth*, it becomes apparent that knowing what to teach must not be left to whim and fancy. Truth also has a relationship to reality. It would be as nonsensical to have truth and reality at variance with one another as it would be for the schools to deal in nontruth. Knowing what to teach is as important as understanding the nature of the learner.

Philosophy is useful in helping decide what to teach. Perhaps it is more accurate to say that philosophy must decide what truth is to be held in highest esteem and offered as the stock in trade of the schools. Ultimately, the

educator's philosophical framework represents presupposition about knowledge and provides a basis for knowing what to teach—truth and knowledge. That same framework also provides the educator with methods of analysis in the search for truth.

THE ESSENTIALIST CURRICULUM

The essentialist curriculum reflects the notions of truth held by the philosophical idealist and realist. These two philosophical systems agree on one aspect of truth: to both, truth is spelled with a capital "T." Truth is fixed and unchanging, and the curricula of schools must therefore be the same everywhere.

Two major elements make up truth in the essentialist's curriculum. The idealist finds truth as idea. The great ideas enduring the test of time are candidates for inclusion in the curriculum. Literary classics and writings of great historians are primary source documents that reveal truth. Ultimate truth, however, exists in the mind as idea.

The curriculum of idea focuses on developing the mind as the possessor of truth. The mind, in turn, is characteristic of the person. Here is found the object for receiving and paying attention to truth—the person or self and the attendant mind.* Whatever goes on in the name of education, according to the essentialist-idealist, must be fit stuff for enlarging the ideas of self and ideas held in the mind.

The realist's influence on the curriculum of the essentialist is equally important. As in the world of idea, the physical world of truth is fixed. Truth is not changeable or changing. Truth simply is and awaits the individual to uncover, understand, and apply knowledge to life's activities and affairs. At its highest level, the truth that is arrived at through sensory perception and verified through careful scientific investigation corresponds with the ideas about that which is known.

A fundamental difference exists between "idea" as held by the realist and that of the idealist. The realist depends first on sensory perceptions and scientific examination to uncover facts and information about reality. This process eventually leads to the formulation of "idea" to correspond with physical reality. On the other hand, idealists come to idea through mental processes that are not entirely dependent on physical sensations and stimuli for verification. The realist sees truth as having application to the things of

*Self and mind here are microcosms of an absolute self and an absolute mind—not a theological figure called God.

the world; therefore, mastering facts is an important precursor to application. The idealist holds that ideas as truth is power to influence the affairs of people rather than the things that represent the physical world. Both get to essentially the same end via different routes.

The essentialist captures the truth of the idealist's and the realist's worlds. Initially, truth has a universal quality and rigidity. Part of knowledge comes from a perfect world of ideas. Complementary knowledge comes from a universe displaying immutable laws. Taken together, there need not be any other source of truth. After all, what else is there?

THE PRAGMATIST CURRICULUM

The pragmatist's claims for truth are at variance with those of the essentialist. First, truth is spelled with a small "t," and what is called truth is more appropriately labeled as *tentative truth*. Stable facts are acceptable, but rigidity of knowledge that precludes examination and transforms such knowledge into dogma is totally unacceptable. Knowledge under this conception of truth is open-ended and ongoing, subject to error, and in need of continuous reevaluation. Second, truth is found not in the mind or in nature, but rather through the experiences of temporal beings.

Truth for the pragmatist is measured by its workability. Truth is workable when it accurately anticipates or predicts events or solves the problem at hand. (This does not mean that a lie becomes truth because it works by getting the teller out of some difficulty. The truth here is that telling lies is a predictable way of escaping a situation—temporarily!) Truth becomes the instrumentality that helps people to manage the affairs of society. In this sense of workability, truth is workable when it stands the test of careful examination vis-à-vis the methods of scientific inquiry.

The public nature of truth is important in the epistemology of the pragmatist. Although the individual has experiences of a private nature, they are not the source of knowledge. Experience that is open, testable, and may be warranted is the only kind of experience that produces knowledge. Truth and knowledge are of the community of people and are not the private domain of great scholars or of those who have spent a lifetime uncovering the nature of the universe.

Deciding what to teach in the schools hinges on several points. Truth is the property of the community and not of the educator, whether at public mandated levels or in institutions of higher education. Knowledge has a quality of workability that makes it useful in dealing with the business of living. Truth is also characterized by fluidity and change. The pragmatist is open to the possibility that what is considered as truth today may not be true tomorrow. The final decision about truth is left to the common and collective experiences of people.

THE EXISTENTIAL CURRICULUM

The existentialist posits that truth is the absolute choice of the individual. The person arrives on the world scene without a voice in the matter of initial being; but once there is cognition of self and a declaration that "I am," all other matters become subjected to individual choice.

The freedom to choose truth carries a heavy responsibility for the existentialist. Choosing represents a level of commitment that is inescapable. Knowledge is a matter of individual understanding and belief that carries with it a built-in attachment that directs individual behavior and decision making.

The attachment to knowledge and truth for the existentialist is at a level far different than those of the essentialist or pragmatist. For the existentialist, truth is not an idea or the laws of the physical world or the collective property of the community. "Truth," declares the existentialist, "is mine. It is personal and a part of who I am." And because truth is so much a part of the person, it has a compelling force on human activity. At the same time, it may also be an escape from rationality.

Truth in the existential system is represented by knowing at two levels. The first level is represented by a perceptual awareness of being and the existence of other forms of being—animate and inanimate. The more important and second level may be described as being conscious of personal consciousness of the world. The first level is somewhat like the experiencing process and scientific method of the experimentalist. It is the second level of knowing that brings commitment and acts as a compelling force in existential being. Level-two knowing puts primacy on personal choice as a basis for truth and knowledge.

The nature of existentialistic knowledge makes it difficult, if not impossible, to declare what knowledge is of greatest importance in the school. If there is truth or knowledge that the schools must seek, it has to be determined by the individual, deliberately and knowingly chosen. The truth of the school is the person. Knowledge grows out of selfhood, choice, and its attendant commitment. There is no truth, no knowledge of value, beyond the individual.

SCHOOLS AND SOCIETY

The elements of an educational philosophy come together in declaring the purposes of schooling. The nature of the learner, the role of the teacher, and truth are only partial representations of a philosophical system. The overriding consideration of why to have schooling in contemporary society sums up what a philosophy of education really means. There is, perhaps, little

argument that schooling is the way society maintains continuity; but the kind of continuity that is emphasized finally tells us what the educational philosophy believes has the greatest value.

Value questions are a concern of philosophy.* The question of what people ought to value stirs the emotions and minds of individuals on many fronts. Attempting to answer questions about what people "ought to" may generate more heat than light. However, unwillingness to seek an answer is a failure in courage and philosophy.

Providing a brief glimpse of how each of the three philosophical groups answers the question about what our schools ought to hold as valuable is itself a difficult road to travel. An adequate treatment would be too long a journey in the context of this book. A brief discussion is offered next as an outline for understanding how each philosophy can assist in determining where educators may place confidence and trust for the future.

ESSENTIALIST VALUES

Essentialists see schools as a way to preserve the heritage of the past and to pass forward truth, which is the same everywhere. Knowledge is already settled and there is little need to argue the nature of that knowledge. The good life is based on what is equally settled and the major purpose of education is to inculcate the learner with values already agreed upon and to pass on established truth.

Idealism's influences maintain that a properly developed intellect is the means for achieving the good life. The school, therefore, has a primary purpose to provide an environment conducive to intellectual development. The more the individual mind is able to develop, the greater the opportunities that will be provided to that individual. It is through this selective process of development that the greatest ideas of all times will be preserved. In fact, to encourage the greatest of intellects to become highly specialized will help ensure the continuity of the future with the past. Those with lesser aptitude for intellectual development are to be trained to apply the truths understood by those with the highest intellectual capacity.

Realists influence the essentialist's program in areas related to the physical world. The world is a place controlled by natural law. Individuals are observers of nature and must adjust to what exists in it. The behavior of individuals may bring about changes in the environment, but such changes are predictable and based on the immutable laws of nature.

*Logical positivism is excepted from this statement.

In the essentialist view, schools are a place to observe the natural laws of the universe. Laboratories and experimental settings provide the appropriate conditions for the learner's observations. Furthermore, acquiring the techniques of science, memorizing facts, and knowing the answers to prescribed questions further the ability of the individual to cope with what is.

Essentialism represents the blend of the idealist and realist systems of philosophy, and conservatism is its predominant characteristic. Accumulated knowledge and societal traditions are foremost as subjects for schools. Knowledge becomes an end in itself and need not have reference to the practical activities of people. Preserving the moral and aesthetic traditions of the past serves as a further reflection of essentialism in education. Finally, developing intellectual capacity and knowledge of the physical world epitomizes the capacitation of the young for the future projected by the essentialist.

PRAGMATIC VALUES

Pragmatism links schools to contemporary social structures. The business of day-to-day living is as much a part of schooling as the individual is a part of society. These three, the person, society, and schools, are inseparable. Although societal institutions influence what the individual will become, they remain as servants of people. It is in this capacity that pragmatism finds a place on the front edge of knowledge.

Change is a key word in the school of the pragmatist. Truth and knowledge are not set, and preparation for adapting is a primary function of schooling. Examining open questions, applying problem-solving techniques, and trafficking in the daily affairs of society are ways of preparing for change. Preparing for change is the school's business.

Experience is also important in schooling, in the pragmatist's view, and individuals bring experience to the educational community. The schools are responsible for building upon that experience by providing opportunities for interaction through new experiences—reconstructing experience by a growth in experience. Learning by doing is interaction and experience. Being out in societal agencies and the community expands experience and creates further interactions.

The community is as appropriate a site for schooling as the schoolhouse itself. After all, if preparing for life by living now is a goal of education, where besides the community does life occur? The community is also held in esteem for the truth it represents. The openness of pragmatist epistemology asserts that truth can be derived through group judgments. From this viewpoint it is possible to declare that truth can be arrived at through the combined experiences of educators and community.

Participatory opportunities—community in school and school in community--are also a hallmark of a democracy. Pragmatists prize democratic behavior as a goal of schooling. Change directed toward improving society, including education, is contingent on the willing participation of people as individuals and as members of social groups. A pragmatist educator seeks to develop responsible, self-directed, and self-controlled individuals in furthering a democratic society.

Education to the pragmatist is a journey of a lifetime. The unsettled nature of truth, the certainty of change, the need for continued interaction, and the very nature of a democratic society compel individuals to engage in education throughout life. Schooling, then, is not a one-time event to be experienced and then stopped with a diploma, a degree, or even several degrees. Schooling and participation in organized learning activities are living now and preparing for life, too. In the final analysis, schooling is a public duty. It is the way socialization of the individual occurs, democratic institutions are maintained, and individuals "become."

EXISTENTIAL VALUES

Existentialists seek to create an environment that allows the individual to declare what it means to be. Whereas the other philosophies presented seek to answer what it means to be, existentialists defer the answer to the understanding and choice of each individual. Schooling, if schools are even necessary, must represent a social institution designed to encourage choosing. Pat answers and fixed ideas are avoided in favor of activities designed to encourage and promote choosing.

Schooling, in the existentialist view, is largely an axiological enterprise. The activities of education represent an immersion of the individual in making choices, and choosing is a valuing or axiological undertaking. Epistemology, in the sense of other philosophies, is not the first concern of the existentialist. The individual has ultimate control of personal truth through making a choice as to what is true. Truth is never forced on the individual, either by the teacher or through group influence. Above all else, the schools must not dehumanize, control, and subvert individual authenticity.

Schools must encourage programs that help individuals shape a definition of being and truth. The individual first exists without a choice in the matter. The person just is. Through proper development, by proving, examining, and evaluating, the individual grows beyond existing. By choosing the nature of "I am," each person affirms the individual character of being. Education assists the individual to take increasing charge of selfhood and to expand understanding of the world in which the self lives. Understanding, in this case, refers to assigning meaning to what is.

Concomitant with choosing, existentialists believe that schooling should encourage commitment. Choosing and accepting responsibility for choosing, together with its consequences, is a reflection of an individual and personal understanding of what it means to be. The meaning of life—in terms of love, pain, justice, cruelty, tenderness, death, and its many other possibilities—is also a concern of existential education. The existentialist seeks to have the schools help learners to become committed to choosing and caring about the consequences of that choice. It is then that the individual understands what it means to be.

LOOKING BACK

The various views of education presented in this chapter have obvious differences. These differences emerge in a reasonably clear manner when comparing positions on fundamental questions about education. Perhaps the differences highlighted in these brief summaries represent greater extremes than would be evident in practice. Nevertheless, differences do exist, and anyone faced with the task of arriving at a philosophical posture must be concerned with the nature of philosophical differences and the corresponding implications for educational practice.

LOOKING AHEAD

The four questions posed in this chapter—"What is the nature of the learner?" "What is the role of the teacher?" "How do you determine what is to be taught as truth?" and "What is the purpose of schooling?"—are significant questions in education. They are not the only fundamental questions that should be asked, just as they are not the only questions that could be asked. These four questions do, however, lend a framework for moving ahead in the task of stating a philosophy for vocational education. They are useful in examining the philosophical implications of vocational education's principles. In turn, the principles provide the underpinnings on which vocational educators can hang their philosophical "hats."

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CHAPTER 7
PRINCIPLES TO PHILOSOPHY

The principles of vocational education carry philosophical implications for vocational education. However, the principles in themselves are not philosophy, nor do they substitute for a philosophy. The principles represent the preferred practices in vocational education and may be characterized as representations of values held by vocational educators. They are enduring examples of decisions and choices made about the practice of vocational education by its practitioners.

AN INDUCTIVE PROCESS

It is possible to translate the principles of vocational education into a philosophy for vocational education. The inductive nature of this process requires that important practices of vocational education be identified (the principles serve this need) and that the principles be analyzed in terms of philosophical issues (the four educational questions fill this role). The analysis, in turn, allows a specification of educational theory inherent in the principles and an inference of the philosophical assumptions represented by the theory. Finally, a synthesis of these representations may be developed into a coherent pattern as a philosophy for vocational education.

Coherency must be a characteristic of any philosophy of education. Coherency in philosophy may be described simply as having the quality of "hanging together;" that is, the parts are not at odds with each other. The nature of reality, truth, and value, together with responses related to questions of reality, truth, and value, need to spring from and represent similar assumptions about the nature of things. The universe has to come off looking like one universe, with persons having commonalities in being, and with the nature of truth and values being determined in a similar manner. It goes without saying that every educator need not agree on one philosophical view. It is important, though, that a philosophical view have only one set of assumptions and that those assumptions be coherent.

What, then, do the principles of vocational education suggest for a philosophical position? Putting it another way, what is the response of vocational education, based on the principles of vocational education, to the four educational questions about the nature of the learner, the role of the teacher, the source of truth, and the purpose of schooling?

In answering the four questions, one should not expect all principles to address each question, anymore than one should expect only one common response to each of philosophy's three questions about reality, truth, and value. It is reasonable, however, to anticipate that several different principles address each educational question. In this process of initial analysis, a search for coherency must be kept in mind; examining each set of responses for coherence with each other is a later step.

PRINCIPLES AND THE NATURE OF THE LEARNER

"Learning by doing" is a primary theme of vocational education. The idea of involving the learner in some active role of interacting with things and people in school and community—a reconstruction of experience—is clearly conveyed through vocational education's principles. Supervised occupational experience is a preeminent example of involving the person in the transaction called learning and utilizing resources that are beyond the walls of the classroom. Supervised occupational experience means interaction of learners with the world. It is learning by doing.

The person, according to vocational education's principles, is in the process of becoming. Becoming, in this case, is a journey of a lifetime. In vocational education, having a prevocational program and having career education that precedes those experiences represent important aspects of the journey. Promoting lifelong learning and recognizing the need for new training and retraining all indicate a concern for people as they engage in becoming. Becoming throughout life represents the changing nature of being.

The demands of society require individuals to adapt to change; life cannot remain and is not static. Vocational education's principles provide clear recognition of the changing nature of reality as well as of values. The principle that refutes sex bias and sex-role stereotyping is a primary example. In the early evolution of vocational education in this country, society deemed certain roles as appropriate for males and others for females. Vocational education reflected this attitude in enrollment patterns and other indicators. Today, the societal change toward eliminating sex bias and sex-role stereotyping is also mirrored in vocational education. As a result, students are encouraged to adapt and change their ideas about the nature of being and reality. This latter statement also has application to vocational educators.

Individuality and the personal nature of the individual's experiences are apparent in the practice of vocational education. Learners enter vocational training with unique personal experiences and needs. The uniqueness of needs emerges in the principle on special needs, which places emphasis on special populations. The principle confirms the recognition of subpopulations within society and reaffirms the nature of experience as individual and personal. This is as true for any person as it is for those who are represented as subpopulations or persons with special needs.

The importance of student organizations in vocational education underscores the individuality of experience and puts learning in a societal context. The democratic nature of our society encourages self-governance and participatory decision making. Vocational education's student organizations exemplify a belief that learning about democracy is more than study—it is action. The structure and conduct of student organizations encourage participation and group decision making in nearly every area of organizational governance. At the same time, the variety of opportunities afforded the learner reinforce notions about the uniqueness of an individual's experience and needs.

The conduct of the vocational education enterprise communicates the importance of thinking as a means to doing and being. Thinking is not an end in itself, however. Thinking is a means to transform ideas, people, and experience. It is an active process that ultimately results in a productive event. Placement is a representation of that transformation. Assisting the person through placement to take the next step in being (e.g., job, education, military) is an implementation of the thought-into-action concept.

The learner, according to the principles of vocational education, should emerge with some rather well-defined qualities. These may be partially summarized in a few brief statements. The learner is a unique being who possesses experiences that are not identical with those of others and who has needs that are as unique as his or her own past experiences. The learner is in the lifelong process of being and interacts with the world in becoming. Experiencing, interacting, and becoming are basic concepts in vocational education about the nature of the learner.

PRINCIPLES AND THE ROLE OF THE TEACHER

Questions about the role of the teacher and the nature of the learner are closely associated. Both deal with the nature of being. What the teacher does in the classroom ought to be influenced by the nature of the learner. Essentially, how the learner "becomes" is the same as the way a teacher "becomes." Whatever the philosophical view of reality, views of the teacher

and the learner ought to be complementary and demonstrate consistency in what it means "to be."

Experiencing, interacting, and becoming are basic concepts about teachers of vocational education, just as they are basic concepts about learners in vocational education. According to one principle of vocational education, the vocational educator is expected to be professionally and occupationally competent. Occupational competence, for certification purposes, is almost always interpreted as years (sometimes translated as hours) of experience.

Occupational experience, in many instances, has taken precedence over professional requirements. That priority reflects assumptions about the preparation of vocational teachers and equates experience in the world of work to a university education. In fact, experience is often considered to surpass university training in the area of the vocational education occupation to be taught, and the experienced worker may only need supplemental preparation in areas related to pedagogy. These assumptions lack a base in research; however, as assumptions, they address the nature of the teacher. Experience as a worker becomes not only a requirement, but a preferred quality for the teacher in vocational education.

Just as teachers are expected to have vocational experience, they are expected to provide experience. The supervised occupational experience principle addresses the need to provide learners with experiences in the world of work. The learning-by-doing theme that is characteristic of vocational instruction further emphasizes the role of experience in becoming. Instruction in vocational education, then, is grounded on and keyed to experience directed or supervised by the teacher.

The teacher is also viewed as a participant in the learning process in vocational education. For example, the supervised occupational experience principle, when implemented, not only provides the learner with experience, it also provides opportunities to the teacher for learning and staying current with developments in the work world. Furthermore, returning to the world of work as an in-service training activity stresses the necessity of lifelong learning in maintaining and furthering the teacher's qualifications. In essence, the teacher is as involved in a transactional relationship with the world as is the learner. The teacher lives out a reconstruction of experience.

At no time do the principles of vocational education suggest that the teacher is the final authority in vocational education. It is not a matter of the learned teaching the unlearned. The vocational educator first depends on the knowledge held by the community as a basis for validating what to teach, and then the teacher proceeds with instruction based on the learner's past experience. Teaching in vocational education involves interaction between teacher and student, both of whom are learners engaged in the process of becoming.

The principles of vocational education project a clear image of the teacher's role in vocational education. In keeping with those principles, the vocational educator is responsible for creating opportunities and directing the active involvement of the learner in new experiences. It is through the reconstruction of experiences that the learner is able to reorganize, incorporate, and integrate the totality of experience. Experiencing, however, is not limited to the learner. The teacher is also experiencing, interacting, and learning along with the student. Finally, the teacher is not the final representation of truth nor the provocateur of selfhood, just as the learner is not a receptacle to receive truth nor a being seeking the existential self in order to declare the nature of truth. The teacher, like the learner, is engaged in being that is becoming.

PRINCIPLES AND THE CURRICULUM AS TRUTH

Truth is a school's primary stock in trade. It would be nonsensical to declare that the schools are in the business of dispensing "untruth." In the context of vocational education and the role of the vocational educator, *dispensing* truth is equally nonsensical.

What is held up in the schools as knowledge represents truth as it is currently known. The question of how truth is validated is of considerable importance. In fact, several outcomes hinge on the answer. Truth and questions about the validation of truth predict what is known and knowable, together with what curricula schools offer. Truth and methodology for knowing truth hold center stage in the business of the schools.

A perusal of vocational education's principles leads to the conclusion that vocational education's truth is spelled with a small "t". What is known as truth may be better described as tentative truth, the best truth we have to rely on today. After all, change is among the greatest of certainties, and truth is subject to change. Furthermore, the changing nature of truth conveys the understanding that truth is not fixed and everlasting; therefore, truth should not be spelled with a capital "T".* Several principles serve as illustrations of this point.

*A word of explanation is due to those who have trouble seeing truth as being changeable, especially in the area of religious beliefs. Much of what is acted upon in our religious lives and is treated as truth—Truth, if you prefer—is based on faith. A number of instances can be cited. The divine inspiration of the Bible, the virgin birth, and the resurrection of Jesus are primary examples. Although theologians may argue the point, many of the laity are willing to accept these as knowable through faith. The point is that faith is one way of knowing truth. It is important, however, to distinguish what is accepted on faith and what is determined by some other means. It is equally important to be able to resolve any conflicts that emerge from faith and another way of knowing truth. The situation becomes very much like the problem of the eclectic discussed earlier in chapter 6.

The vocational education principle that emphasizes seeking advice from the community stands out as an illustration of the tentative nature of truth in this context. Two aspects of this principle are noteworthy in regard to truth. The first is recognition of the fact that the educator is not the sole person to determine truth and what is to be taught. The teacher, as a representative of the learned community, is not privileged to have a firmer grasp on truth than those who interact with truth in the community and who also experience the changing nature of truth. The second point is that truth is evolving, making it necessary to change the curricula to keep pace with the community. The community would not experience much change if truth was already fully determined. Truth is tentative, however, and the advice of the community is needed to validate the truths to be taught in the vocational curricula.

Selecting what to teach from all that is accepted as true may be thought of as a value question. In vocational education, however, that decision is most assuredly a question of what works in meeting learner needs. The consequences of what is validated as truth comprise the overriding issue, and that classifies the issue as an epistemological concern. As such, the process of how the inquiry into truth is made is also important. And so we come full circle, back to advice from the community.

According to another principle of vocational education, the curriculum should be based on the world of work. That principle, literally interpreted, means that the community is in the school. The activities of life found in the community are the source of and represent the vocational curricula. Learning is not abstract and removed from life; it is life itself. Learners are afforded opportunities to integrate experiences that are common into productive activity in vocations.

A further refinement of this concept is found in the job-entry principle. That principle provides for a more specific integration of past experience, perceived personal goals, and new experience. The learner's choice of an occupational area presumably is based on past experience and a process of sorting and choosing. New experience provided through a selected curriculum allows the learner to integrate the totality of experience. That integration evolves from experience and truth based on community. In this instance, truth is related to the qualifications of a job-entry position in the chosen vocational area. Again, it is a matter of the community in the school.

Truth ultimately is determined by "what works." What works, though, is not a whimsical or capricious decision. The workability of truth is tested against consequences and verified through careful process. The methodology of science—the scientific method, if you please—is utilized in finally arriving at truth. If a curriculum is based on the world of work and preparation for at least a job-entry position, it is legitimate to ask whether students

are placed in appropriate roles. The placement principle underscores the workability of truth. Similarly, the follow-up principle directs attention to the adequacy of the curriculum. The evaluation principle also adds to and stresses the workability of truth while drawing from the principles on job entry and follow-up for weight of evidence to determine what truth works.

A curriculum, according to the principles of vocational education, should be based on "truth," not "Truth." The curricula of vocational education are fluid and changing to reflect truth found in the progressive and changing community. The community becomes a part of and is found in the school. Living and being a part of community is a here-and-now occurrence, not something to prepare for as a future event. A curriculum's credibility should also be based on how well it works in serving the needs of learners and community. Finally, a curriculum in vocational education is tested and measured according to scientific methods that allow judgments concerning the workability, reliability, and truthfulness of the curriculum.

THE PURPOSE OF SCHOOLS IN SOCIETY

The question of "why should we have schooling in our society" is, in many respects, more important than any other philosophical questions in education. As an axiological question, it touches peoples' lives in an area of great significance—their values. Values gain more attention from the average person than questions of reality and truth. Values tend to be what we live by. Frequently, values are based on what has been passed on to us from the past and are not the result of critical thinking. In the final analysis, values in terms of "why schooling" may be the primary determinant of what happens in the schools and may perhaps even dictate the milieu of the classroom.

It is possible for a significant program, such as vocational education, to reflect values different from those of general education. The possibility, in fact, is better expressed as a high probability. Herein lies a major source for disagreement. When values are at stake, arguments tend to become more emotional and less rational. Arguments about values also tend to obscure the importance of other major philosophical questions centering on reality and truth. Recognizing that value questions need to be linked logically to questions about reality and truth, and understanding the rationale behind value choices, can help vocational educators argue differences in value choices from a position of strength and rationality.

The principles of vocational education support the claim that the schools of this nation belong to the public. A further extension of that claim declares (as was pointed out earlier in this chapter) that the community is in the schools. The schools, according to vocational educators, are designed to

accommodate living today. Schooling, from the vocational education viewpoint, is directed toward the needs of the community, learners included. According to this principle, living is not dualistic, with one life in the school and a later life in the community. Living is now, and learners are members of the community who are able to identify their needs. Those needs must be considered along with those of other community members and agencies.

Vocational education, as a part of a comprehensive educational program, also stresses the existential nature of schooling. Community life is not separated in specific segments, and schooling ought to be viewed from the same perspective. To separate vocational education from the mainstream of education is to deny the oneness of life and community. A comprehensive educational plan brings together all elements of the social structure and encourages learning to address problems that are a part of a diverse society.

Student organizations contribute to the importance of living today as a value in education. Democratic behavior, participating in the affairs of community, and contributing to others are all emphasized in student vocational organizations. Schools are a part of a democratic society that encourages similar values for its members. In terms of potential influence on the individual, the student vocational organization is an outstanding instrument for creating opportunities to live today within the social structure of our society.

Supervised occupational experience takes a second step in helping vocational education represent living today. The supervised occupational experience moves the learner into other community affairs and locations. The learner gains new experiences in the dimensions of human relations, the work ethic, punctuality, productivity, economics, structures of management, employee-employer relations, and a wide variety of other experiences that are a part of the producer/worker life in contemporary society. Supervised occupational experience strengthens linkages and helps integrate community and school. Instructional staff who supervise students gain in personal experience and share their own strengths with the community. These interactions foster the learning-by-living emphasis found in vocational education.

Schooling as learning to manage change is emphasized in vocational education. The very nature of vocational curricula as tentative truth is a clear illustration of experiencing change through education. Secondary curricula based on families of occupations reinforce ideas about change as a facet of contemporary life. Recognition of the need for lifelong learning, as promoted through vocational education, adds yet another dimension to understanding (1) how change impinges on individuals and (2) their corresponding need to learn how to cope with change.

Coping strategies are an important aspect of guidance activities, which are offered as a support to learners in vocational education. The guidance function, coupled with exploratory and career education programs, helps develop self-understanding and a base of information and experience to assist decision making. Developing learner awareness of personal needs and requirements balanced against personal limitations and requirements of various occupational options is preparation to cope.

Exemplary and innovative activities epitomize the vocational mentality about change. Change is a phenomenon of life, and charting the course for change may occur through exemplary and innovative programs. As in other instances, such change is motivated by the desire to improve opportunities for the learner. Improving programs is also the ultimate goal of two additional principles of vocational education, evaluation and planning.

Planning may also be viewed as building the future. Experience in providing vocational education is a keystone in looking forward to future needs. Planning done with openness of attitude and a desire to improve provides some of the ingredients necessary to build toward something different—to improve—from what exists today.

Values promoted though vocational education grow out of the public's expression of what ought to be. Continuing support for the work ethic principle is not found solely in the domain of vocational education. Although some elements announce the death of the work ethic in America, the tone of public sentiment indicates its continuing good health. The roots for the work ethic principle were originally found in the public's value system. The publicness of vocational education's values is further shown in the advice-seeking behavior in vocational education. Although public advice does not dictate what values are to be prominent in vocational education, such advice has a powerful influence on those values.

The purpose of schooling in our society is of concern to vocational educators. The principles of vocational education illuminate the path of understanding. In rather simple language, these principles suggest that schooling provides an opportunity to learn by living, to prepare for and manage change, and to plan together for the future chosen by our society. What we choose is, after all, expressed best by the public that is our community, state, and nation. Continuity in our democratic culture can be achieved through the process of socialization called schooling or education.

VOCATIONAL EDUCATION'S POSITION

The principles of vocational education provide clear directions toward a philosophy. These principles are not philosophy, nor are they philosophical in nature. Neither are they theoretical; they have grown out of and been

verified by many years of successful practice in vocational education. The fact that principles represent successful practice is the key to arriving at philosophy.

An inductive process is not the only way to a philosophy, but developing the philosophical bases for vocational education from its practices is an inductive process. Without reference to principles, practices, or past experience, any of us could sit and speculate about the nature of things. The eventual outcome could be a philosophical statement; however, such a statement, until accepted by a larger group, would be a personal statement of philosophy. It would not be a philosophy for vocational education.

The goal of the inductive process presented here is a philosophy for vocational education. As such, its foundations of support are rooted in what has been written and edited by vocational educators. It is what we say about ourselves as vocational educators and what we claim for vocational education. Although this inductive process may result in a philosophical position representing the author's philosophy of education, that is neither a prerequisite nor a necessary outcome.

One may assume that the inductive nature of the process followed is free of bias and subjectivity. It is not; although, that limitation has been kept in mind. The references used, statements selected, and topics developed under each principle all are subjective decisions and represent values of the author, if not his philosophical leanings. At the same time, these decisions ultimately rest on what vocational educators have written and claim for vocational education. The inductive process does help to ensure that objectivity is maximized in analyzing the philosophical implications of vocational education's principles (although ensuring maximization of objectivity may be neither reasonable nor desirable). What, then, is the philosophical position of vocational education, based on its principles?

The pattern of assumptions that runs through answers to the four questions posed—answers drawn from the principles of vocational education—are somewhat self-evident. In analyzing vocational education's philosophical position, one word most frequently emerges—*experience*. Experience is king of the philosophical hill in vocational education. Experience is both noun and verb, and in the verb form it is transitive—active, doing, and conveying a relationship.

The world of vocational education emerges as a place of experience. The person, through experiencing and interacting with the universe, is able to declare the nature of reality. However, the nature of that reality is not strictly personal; it is subject to verification and confirmation through the experience of others and through careful examination. The world is social and not private, and it is the social nature of reality that provides the expansiveness of experience for the individual.

The transactional nature of reality is important in vocational education. Creating and providing experience in the transactions of being are central in reconstructing experience and helping individuals "become." Transaction is the basis for being and for arriving at an understanding of what it means to be. Without transactional experiences, the individual would not have addendums to integrate into being and to modify understanding of self.

Reality, in all of its ontological aspects, is not fixed. The universe, including human life, is in a state of flux, flowing and changing. Because of the changeability of reality, it is not possible for the human to say what is ultimate reality or where the limits are of what a person may become. The ultimate nature of reality defies the human's ability to know, except that reality will change with the experience of people.

Truth for the vocational educator is much like reality—based on experience, tentative, and subject to change. In spite of the tentative nature of truth, humans can validate statements of truth through the techniques of science. On that basis, reliable truth is selected from alternative candidates for truth and represents what works. What works, however, is a carefully weighed decision representing desirable consequences for society.

In a democratic society, a concern for social and human consequences carries implications about the public nature of truth. No one individual is given sole inheritance rights to truth. Truth is public property and open for inspection. The more varied the examination and testing of truth, the more reliable and useful its predictive properties. Truth is workable when it can be used to anticipate how things generally operate and to project the most likely consequences.

Truth is evolving, tentative, and open to new experiences. The interactive process of truth getting—experience and reflective thinking working together—leads to clarifying problems, formulating alternative solutions, testing the alternatives, and arriving at some conclusion. Throughout the process, social and human consequences are kept in mind, as truth seeking, like truth, is an open, public activity. Although private experience is not deniable, it is public experience—open, verifiable, and testable—that is capable of producing new truth. Truth is activity that never reaches a terminal point, but remains open-ended, awaiting new human experiences.

The public nature and fluidity of truth convey directions for the vocational educator. Truth, being in the public domain, is not determined solely by the teacher but in cooperation with the community. Learning is directed toward understanding the changeability of reality and truth and toward developing the individual's ability to cope with change and to solve problems. Because the reconstruction of experience begins with the person's prior experience, learning needs begin at varied points. Even with varied needs in learning, learning directed toward solving real problems based on

life's experience is most useful in the reconstruction of experience. In vocational education, learning is doing.

Values for vocational education are also in the public domain. The public influences the selection of the goals for the public schools. The determination of ethical values upheld by the schools is a reflection of the public's view of what ought to be. These are choices that represent preferences in values and designate what people are willing to settle for.

A democratic society accepts the responsibility for making its own value choices. What eventually is designated as valuable is determined by democratic processes. (Democracy is, in fact, process, a way of behaving to ensure the same opportunity for equality and freedom to each person.) Such decisions may only be achieved through the involvement of society. The consequences of value decisions rest with the social order, and such decisions merit the same application of scientific thinking and reasoned choice as does truth. The democratic process demands public acceptance and accountability for value decisions.

Vocational education represents a value choice by society. Vocational education is selected as one way of implementing society's desire to have individuals be productive and contributing members of the social order. Working together in a cooperative and democratic manner, as emphasized in vocational education, is an extension of the democratic process valued by society. Furthermore, the emphasis in vocational education on its role as a part of a comprehensive educational program underscores the complementary diversity—a value choice—of our democracy. In the final analysis, the values of vocational education are first expressed by the public.

Analysis of the principles of vocational education allows the declaration, "Vocational education's philosophical position is pragmatism." The assumptions of the pragmatist correspond with the nature of practice in vocational education. Vocational education's assertions, based on its principles concerning the nature of the learner, the role of the teacher, the source of truth, and the reasons for schooling, all align with the pragmatist's position. The practices of vocational education (its principles taken in unity) represent coherency, harmony, and internal consistency, and avoid self-contradiction. The same is true of the philosophy for vocational education. It is a harmonious whole that emerges with coherency and unity.

Philosophy to the pragmatist is like all else: it is unfinished business and in the state of becoming. New experiences will help create additional ideas and understandings—a reconstruction of experience, if you please—as to what it means to be and the nature of truth and value.

The unfinished nature of a philosophy for vocational education is both challenge and opportunity. Vocational educators need to continue becoming, to improve personal understanding of who we are and what we need to do

through vocational education, to use philosophy as a framework for synthesis and evaluation, to enlarge and improve opportunities for learners to gain experience, to continue struggling in philosophical development, and to influence and help direct all of education toward meeting the needs of our contemporary society. This list, of course, is not exhaustive. It does, however give a glimpse of the tasks ahead and of how it is possible to apply a fundamental and expanding knowledge of philosophy to education in a democratic society. The philosophical journey has only begun.

CHAPTER 8

PHILOSOPHY, A TOOL FOR EVALUATION AND SYNTHESIS

Although the pragmatist's philosophical journey is never finished, the pragmatist may be characterized as having arrived. This seeming anomaly is no different than thinking about people as being and, at the same time, declaring they are becoming. The pragmatist "buys" today's philosophical assumptions without limiting the universe to what is currently accepted. The pragmatist is able to accept what is known and knowable today, using it to predict outcomes and to anticipate future events, and still believes there will be new experiences to integrate with and expand present knowledge. Viewing philosophy as a journey and searching for progress and improvement of the human condition are far more important than feeling that one has finally arrived. For the pragmatist, the former concept is; the latter can never be.

ASKING THE RIGHT QUESTIONS

The task of the philosopher is to ask the right questions. By asking relevant and meaningful questions which focus on the vital concerns of humans, the philosopher can provide direction for seeking and understanding. From the pragmatist's point of view, asking the right questions leads to identifying the problems that are central to existence and being. For the vocational educator, the right questions help identify the pressing problems and sharpen the focus on other problems that perplex us. In short, the philosopher—the person who uses philosophy to deal with issues about reality, truth, and value—stimulates clarification of important problems that command the attention of humans.

Several steps follow the identification of a significant problem. From the statement of the problem, the pragmatist uses the philosophical assumptions of pragmatism to guide the formulation of alternative solutions. These alternative solutions represent "what works" and are reasonable solutions

for the problem identified. Furthermore, alternative solutions demonstrate the unsettled nature of truth as, in many cases, more than one solution is possible. The solution chosen—the last step in the problem-solving process—represents a value decision. It becomes what one is willing to settle for, and, at the same time, it projects consequences acceptable to and in keeping with the public norm. Throughout each step of the pragmatist's problem-solving process, there is a publicness that corresponds to the overall publicness of the pragmatist's view of reality, truth, and value.

Although asking the right questions and solving problems are fundamental to the role of the pragmatist-philosopher, that role is based on an important assumption—that the universe is a friendly environment, amiable to arriving at solutions. The pragmatist holds that problems can be solved. The affairs of the world work together in ways that make solutions possible. The assumption of solvability, applied to human problems, is critical to believing that improvement and progress are possible. As with other philosophical issues, the pragmatist turns to experience to validate the truthfulness of the assumption. After all, the assumption has proven its own workability.

EXAMINING CONTEMPORARY VOCATIONAL EDUCATION

Philosophy is a tool to be used. Regardless of what set of philosophical assumptions one embraces, philosophy has a practical nature. The practicality of philosophy, however, seems frequently to escape many educators. As was pointed out in chapter 6, each philosophy has a set of assumptions that provides direction in determining answers to questions in education. Philosophy, as a set of coherent assumptions, is a basis for developing consistency in educational practice, formulating appropriate policy, and examining alternatives in either area.

Practice, particularly successful practice, has been foremost as a value in vocational education. It is the record of successful practice that permits a contemporary philosophy for vocational education to be identified through the inductive process. Vocational educators have literally practiced their way into a philosophy. Conversely, vocational educators generally have not philosophized their way into successful practice. A philosophy, however, may be useful in examining current practice to determine the congruity between what we say we believe and what we practice.

Principles of vocational education, even as broad generalizations, are major guides to practice. The contemporary principles advanced in earlier chapters are based on successful practice in vocational education. They represent what we say about ourselves as educators and what we believe is important in providing quality vocational education. As a body of evidence, the principles allow one to inductively arrive at a philosophical position for

vocational education. This does not mean, however, that each principle is consistent within that philosophical position.

Philosophy is an instrument for examining each principle as a part of a coherent whole. It is appropriate to use the fundamental assumptions of the pragmatist's philosophy to determine the fit between practice, as projected by each principle, and the philosophical position itself. A lack of fit essentially becomes a problem to be solved.

The four questions (see chapters 6 and 7) raised in deriving a philosophical position for vocational education have application in reversing the process—that is, using philosophy to test the fit of a principle. Each principle of vocational education may be investigated through what it projects about learners, teachers, curricula, and schools. In some way, each principle of vocational education ought to speak to one or more such fundamental questions—questions that reflect the major concerns of philosophy: reality, truth, and value. If the principle does not, in fact, approach any of these dimensions, there is room for serious question about the viability of the statement as a principle of vocational education. By the same token, any principle that does deal with one or more dimension of philosophy should fit the assumptions of the particular philosophical position embraced.

Twenty-one of the principles of vocational education developed in chapter 2 were explicitly used to develop a philosophy for vocational education; four were not. These four are as follows:

- Federal legislation for vocational education is a reflection of national priorities.
- Vocational education is open to all.
- Research on a continuing basis is fundamental to the dynamics of vocational education.
- Safety is promoted in vocational education.

These four principles, like the others, have emerged over time and represent continuing, successful practice in vocational education. Although the inductive process presented in chapter 4 tends to validate the fit between most of the principles and a philosophy for vocational education, these four have not been so validated. Since the omission of these four was not intentional, they should be suspected of possibly being outside the philosophical framework for vocational education. A closer scrutiny is needed to make a final determination.

The question of federal legislation for vocational education as a reflection of national priorities is clearly a value issue. It also conveys a sense of what the schools ought to be about, or, in terms of the education questions, it points to the purposes of schooling in our democratic society. Philosophy

does not dictate our values or what the purpose of schooling ought to be, but rather how the matter is to be determined. The pragmatist's position is that values are determined by the public. Hence, if vocational education is a reflection of a national priority determined by the governing body of the nation, one must conclude it is a value held by the public as represented through that government. The principle therefore fits within vocational education's philosophical framework.

The principle, "Vocational education is open to all," is also a value question. It reflects what we are willing to settle for. The expression of the value is established by public mandate. Students in private schools as well as those in the public system are to have equal access to vocational education. Sex, race, creed, location, or any other factor is not to bar any individual from access to quality vocational education. The public's expression on this value issue is in keeping with the publicness of values for the pragmatist. The fit of the principle to the philosophy for vocational education is therefore appropriate.

Truth is the central theme of the principle, "Research on a continuing basis is fundamental to the dynamics of vocational education." The principle recognizes that truth is subject to change and that change is a continuous phenomenon. Although truth is a primary concern in determining what to teach, truth and reality must have congruence. Understanding truth can help shape understanding of reality; therefore, research is useful in getting a new fix on reality. The same parallel may be drawn about values. Values are not static, and research can validate the currency of the values promoted through vocational education. Research also implies the use of the scientific or problem-solving method. The methodology and the emphasis on the changeability of things are consistent with the assumptions of the pragmatist. The research principle therefore represents a good fit with the philosophy for vocational education.

Safety is the topic of the fourth questionable principle. A cursory review of the principle is likely to lead to speculation about the appropriateness of this notion as a principle and as a reflection of a pragmatist's philosophy. However, when safety is seen as an attitude, the nature of the issue is clarified; safety is a value question. Determining how the value was derived is critical to the assessment of fit, and in the most contemporary sense, attention to safety is the outcome of congressional action. As with the legislative principle, Congress is a representation of the public view. The fit with the philosophy for vocational education is therefore good.

Philosophy does not necessarily declare the principles of vocational education. Philosophy, however, does help in analyzing a potential principle to see if it is consistent with a set of coherent assumptions representing a given philosophical position. The four principles just examined fit the pragmatic

philosophical position presented for vocational education. With that outcome in mind, and knowing that the other twenty-one principles were used in developing a philosophy for vocational education, it is reasonable to declare that the twenty-five principles of vocational education support the pragmatist's view of vocational education.

A caveat regarding the principles is in order. Determining that the twenty-five principles have currency of fit with the philosophy presented for vocational education does not put the matter to rest. As with other things in the pragmatist's world, the principles of vocational education are becoming. They are not static; change is certain. Thus the caveat: The principles of vocational education need to be regularly investigated and subjected to scientific process and analysis in order to determine their currency and appropriateness of fit with the position embodied in vocational education's philosophy.

Philosophy as a tool for synthesis and evaluation has several applications. Most of what has been presented here has been disposed toward looking at what vocational educators have said and done. Of necessity, this is a backward look. Because philosophy seeks to point to what we ought to do, a forward view certainly is in order. However, before moving to that dimension, another topic, policy, deserves attention. In this context, policy will be thought of retrospectively.

Policy represents the current expectations, operating rules, and guidelines set for directing instruction and management efforts in vocational education. Obviously, policy has important ramifications in the conduct of vocational education. It is perhaps axiomatic to point out that the nature of policy is best observed in the regularity of behavior emanating from those expected to operate according to policy rather than through printed documents. However, the printed form is important in understanding what is expected in contrast to what is done.

Philosophy is useful in examining policy at the local, state, and federal levels and in determining the congruence between philosophy and policy. Since policy is a major determinant of how vocational education functions, policy, appropriately developed, ought to operationalize a given set of philosophical assumptions. On the other hand, policy developed in the absence of an articulated philosophical framework is likely to be haphazard in terms of the philosophical assumptions it supports.

Examining policy for congruence with a set of philosophical assumptions for vocational education is beyond the scope of this book. It is, however, an important venture in the educational enterprise, and a brief discussion of policy analysis in terms of its impact on philosophy is warranted. Some would argue that national policy for vocational education does not exist. Others would take the same position relative to policy in some states. In

goes without saying that if policy does not exist, it cannot be analyzed. It may be that legialative enactments and rules of nonpolicymaking groups have the effect of policy. In any case, such pronouncements can be subjected to the same process and scrutiny as written policy. Local policy is, in most cases, developed and in printed form. Thus, it is local policy that becomes a prime target for assessment and analysis.

Policy for vocational education is likely to affect one or more areas of concern in philosophy: reality, truth, and value. Policy frequently will guide how teachers teach and what schools do. In effect, when policy sets the tone for teacher behavior—not an unreasonable function of policy—it may dictate a particular view of the nature of being, for learner as well as teacher. As a specific example, when policy prevents the teacher from fully utilizing the community as a place for learning and experiencing, policy limits the range of teaching-learning behaviors that the pragmatist's philosophy encourages. The example is not complex, but it exposes in a very real way the importance of congruency between policy and philosophy, if coherent philosophy is to be operative.

The range of policy statements is as broad as vocational education itself. Even attempting to list areas where policy does exist would not do justice to the possibilities. The individual in the local situation (all of us live in a local school district) is in a position to do policy analysis based on a philosophy for vocational education. Determining the primary foci of policy statements is the first step (i.e., determining the policy's relationship to reality, truth, and value). Then, based on the assumptions of the philosophical position taken, one should analyze the fit between policy and philosophy. If there is a lack of fit, it is valid to raise a question about how policy should be rewritten to best represent that philosophical position.

The process of effecting greater congruency between current policy and philosophy is fraught with problems. Policymakers hold individual values that may conflict not only with each other, but also with those positions sought by educators. Special interest groups hold sway through various political conveniences. Even foreseeing the impact of specific policy on instruction may be difficult. Philosophy, although not a panacea, can be useful in helping policymaking bodies develop consistency in the policies adopted and congruence with the philosophical position operating in vocational education. In short, it provides direction for influencing organizational behavior.

EXAMINING THE FUTURE

The future of vocational education may be examined through a philosophical framework. That is, philosophy can assist vocational educators in

making decisions about the future and can help guide policymakers in developing future policies for vocational education. Although predicting the future is an uncertain business and validating predictions must await arrival of future events, the stability of philosophy can help remove some uncertainties and provide an immediate measure of the validity for the future predicted. After all, a set of predictions represents a selection from alternatives and is, therefore, a choice that can be made consistent with the assumptions of a philosophy for vocational education. Putting it another way, there is little sense in choosing future directions that conflict with the philosophical ideals incorporated in vocational education.

Future directions in vocational education extend from its contemporary base. It is not likely that the success of the past will be discarded in favor of a fictionalized version of reality. After all, past experience is too valuable to treat with disdain. Knowing where vocational education has been, and especially where it is today, is as conspicuous as the need for looking to the future.

Evaluation is a valuable means to review the present state of affairs in vocational education. Evaluation processes can produce factual data for examination. Evaluation processes can also provide the public's reactions and reveal the public's concerns. Evaluation processes can stimulate a climate for active debate of values supported and goals sought. Furthermore, evaluation processes, because of the publicness represented in the pragmatist's behavior, provide opportunities for involving other educators and influencing schooling in our society.

Philosophy has a direct relationship to evaluation processes. The assumptions of a philosophic position are central to examining the practices and functions of vocational education. The view of the learner, the role of the teacher, the nature of truth, and the purposes of schooling, as mirrors of the philosophy of vocational education, serve as indices in studying the vocational education venture. Philosophy can help keep attention focused on important issues and raise significant questions that demand answers. Through its own pattern of consistency and coherency, philosophy can also help align thinking in the processes of evaluation. Without a philosophical framework, it is too easy for evaluation to become an instrument of pressure groups and self-serving interests, subverting attention from the themes that are important to the evaluation of vocational education.

Synthesis follows evaluation in looking toward the future. Through synthesis of the currently known and knowable, vocational educators can begin to arrive at alternatives for the future. Synthesis becomes a means for creating pathways to change in vocational education. It is through synthesis that vocational education meets its own philosophical assumption regarding change as vital to becoming.

The alternatives that emerge from synthesis must ultimately rest on the philosophical base of vocational education. The fundamental assumptions about reality, truth, and value provide the securest ties in developing coherency and consistency in seeking new alternatives and in becoming. Human understanding of humans and the nature of the universe is subject to modification for the pragmatist; however, it is that understanding that proves most reliable in guiding the synthesis of new alternatives and futures for vocational education.

Evaluation and synthesis, based on a sound philosophical foundation, optimally lead to a characterization of values. Just as the assumptions of a philosophical position represent a value choice, directions emanating from evaluation and synthesis, when tied to a philosophical base, become alternatives that characterize the philosophy itself. The characterization of values, in implementing a set of philosophical assumptions, represents the ultimate evidence that philosophy holds an esteemed mission in the affairs of vocational education.

Characterization of the values of vocational education's philosophy ought to be evident in both its principles and its policies. As presented earlier, contemporary principles and extant policies need recurring review and measurement against vocational education's philosophy. In the same manner, emerging principles and proposed policies need to be tested against the assumptions of our philosophical position. Together, these processes lead to the new truths and help mold and support the value system.

A CONCEPTUAL FRAMEWORK

The principles of vocational education have served us well. These principles have been the standards by which vocational educators have measured programs for learners. Principles have guided evaluation activities and led to synthesis of new ideas and identification of new values. These same principles have also created the body of evidence for inductively deriving a philosophy for vocational education. Truly, principles have held an important role in vocational education.

The milieu of the past provides a basis for a conceptual framework for vocational education. In the absence of an articulated philosophy, principles have reigned supreme, and they have been deserving of the high position accorded. That conceptual framework may be expressed in this manner:

$$\text{Principles} > \text{Evaluation} \rightarrow [\text{Synthesis} \leftrightarrow \text{Values}]$$

According to this framework, the principles of vocational education are greater than the sum of the evaluation process, which infers a careful examination of the congruency between synthesis and values. Philosophy, however, adds a new element, and since philosophy is greater than principles, we have a new conceptual framework:

$$\text{Philosophy} > \text{Principles} > \text{Evaluation} \rightarrow [\text{Synthesis} \leftrightarrow \text{Values}]$$

The revised formulation indicates that the philosophy of vocational education is greater than the principles of vocational education, which in turn are greater than evaluation processes. Together, philosophy, principles, and evaluation infer a congruency between synthesis and values.

In the new framework, philosophy's relationship to principles is consistent with that indicated in chapter 1. Principles also continue to maintain a position of importance. The shift in emphasis from the earlier model indicates the potential contribution of philosophy for looking to the future. Philosophy has an undisputed role in shaping policy and practice, and when vocational educators are in greatest doubt, it is a security to which they can turn in seeking answers to the perplexing problems that continue to confront them.

A conceptual framework, like a philosophy, is a tool to be used. Fitting together the pieces of the jigsaw we call vocational education helps in comprehending the large domain that vocational education represents. At the same time, it commands attention for elements that help make up the totality of the field. In yet other ways, the new conceptual framework reminds vocational educators that our business is ongoing, dynamic, and changing. Philosophy and a conceptual framework are useful in conducting that business.

A conceptual framework can assist vocational educators as they seek to improve vocational education. An illustration may help clarify the point, and at the same time may demonstrate how philosophy adds an important dimension to the process of seeking answers to complex problems faced by vocational educators.

Consider the principle of supervised occupational experience and its future role in improving vocational education. It is appropriate to ask, "Should supervised occupational experience be a requirement in vocational education?" Initially, let us answer the question using the conceptual framework, but without regard to a philosophy for vocational education. Later, the implications of a philosophy for vocational education will be considered.

In probing the original question, it should be recognized that numerous subquestions can be raised. For purposes of the illustration, the following are possibilities: "Does supervised occupational experience improve learner

outcomes?" "Are there good alternatives to supervised occupational experience?" "Is a supervised occupational experience more cost-effective than other forms of instruction?" "Can supervised occupational experience placements be found for each student of vocational education?" "At what point in the instructional program should the supervised occupational experience occur?" "What is a desirable minimum time for an effective supervised occupational experience?" "Do those who complete a supervised occupational experience get jobs more readily?" Undoubtedly, the reader can add to this list.

Evaluation, an element of the conceptual framework, provides data useful in answering the questions. Generally, the literature on vocational education provides data that support the importance of supervised occupational experience programs in vocational education. Answers to the subquestions raised (and others not raised here) are also generally supportive, although some exceptions and negative data are to be found. However, the weight of the evaluative evidence points to a positive response for the question of requiring supervised occupational experience.

Evaluation data also indicate that supervised occupational experience opportunities are the exception rather than the rule in vocational education. Very few programs of vocational education provide all students with an opportunity for supervised occupational experience. In fact, a majority do not.

A synthesis of the principle juxtaposed with the evaluation data indicates a gap between what is *preferred* and what is *practiced*. The principle is sound, but practice is lagging. Values and the synthesis lack congruence. Yet, in terms of values and a conceptual framework void of philosophy, it is logical to conclude that supervised occupational experience ought to be a requirement in vocational education. When philosophical considerations are added to the conceptual framework, additional considerations obviously come into play. The answer to the major question may change.

In philosophical endeavors, assumptions about the nature of the learner are important in answering questions. The pragmatist's philosophy emphasizes the interactive nature of experience and the importance of reconstructing experience as the way to learning. The pragmatist places an emphasis on schooling as living now and seeks to provide involvement in meaningful roles that are a part of life today. Schooling is not preparation for some nebulous future that draws on passive learning. Proper experiences, based on learner needs, lead to a reconstruction of experience and are educative. The initial position of the pragmatist, here somewhat simplified, clearly supports supervised occupational experience as a practice consistent with pragmatic philosophical assumptions.

In terms of the question about requiring supervised occupational experience, one issue remains. The pragmatist recognizes that the experiences of each person are unique; therefore, due to the role of experience, each individual is also unique. In turn, learning needs are also unique. Supervised occupational experience is an effective way to individualize learning; however, due to the uniqueness of individuals, requiring a supervised occupational experience for each learner may be inappropriate. Philosophically, the answer to the question has to be, "No, supervised occupational experience should not be required for every student in vocational education." The fundamental assumptions of the pragmatist's philosophy ultimately provide a basis for deciding what ought to be and for maintaining a congruence between values and practices. Thus, the response to the initial question changes as the assumptions of a philosophy for vocational education are considered in the conceptual framework.

A new synthesis grows out of several observations. These observations are as follows: (1) supervised occupational experience is consistent with the philosophical position for vocational education; (2) supervised occupational experience is a preferred practice in vocational education; (3) supervised occupational experience should not be a requirement for all learners in vocational education, but it should be made available as an option for each person enrolled in vocational education; and (4) widespread adoption of the preferred practice has been lacking and new impetus for implementing supervised occupational experience must be provided. Clearly, supervised occupational experience ought to be a dominant feature of all vocational education.

Philosophy provides a new dimension for supporting the existing principle. Within the conceptual framework, philosophy directs attention to why those in vocational education ought to seek a more complete implementation of the principle—a reinforcement of an old value, if not an emergence of a new value. (The latter is more defensible than the former.)

The implications for policy are clear. Policy needs to make a point of the desirability of the practice and should encourage full implementation of supervised occupational experience programs. Policy ought to mandate that students earn credit. Policy ought to provide for scheduling flexibility to maximize opportunities for working. Policy ought to provide travel costs related to the instructional nature of supervised occupational experiences. Policy ought to recognize the educator time required for successful supervised occupational experience programs. In short, policy ought to recognize legal, fiscal, and programmatic features required to conduct successful supervised occupational experiences for learners.

This illustration based on supervised occupational experience is not complex, nor is it complete. It does illustrate a way of viewing how vocational

education ought to operate, based on a set of philosophical assumptions. It also shows how a conceptual framework can assist vocational educators and policymakers in their quest to improve vocational education. Vocational education, however, is an unfinished business.

UNFINISHED BUSINESS

The work of philosophy and that of vocational education have a prominent commonality—both are unfinished business. The pragmatist's philosophy stresses the changeability of things and the development of new truth, with all of its own tentativeness. The historical evidence related to vocational education in America underscores change and the emerging nature of truth.

No one person can create the future for vocational education. It would be as preposterous to suggest that this or that is exactly what our future ought to be. Values and truth, in the world of the pragmatist vocational educator, are determined through an open and public process. They are not the private property of individuals any more than they are the private property of the learned. The publicness of these qualities is testimony to the workings of a democratic society—a society where an overriding concern for the individual remains a public value.

Creating the future of vocational education is a problem to be solved. The pragmatist has demonstrated the strength of the scientific process in dealing with problems. In that process, alternative futures are subjected to public acceptance as a part of the measure of consequences, thereby strengthening the future selected. And underlying the entire process, pragmatist vocational educators have a set of philosophical assumptions to guide creation of the future. Even then, unfinished business remains.

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